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A NEW DUROTRIGIC HOARD FROM GODSHILL, HAMPSHIRE

By H. DE S. SHORTT

IN the summer of 1959, during excavations by Mr. John Musty on a pre-Roman and Romano-British site on the east bank of the Avon at Armsley in the parish of Godshill, Hants, a small hoard of four Durotrigic coins was discovered together with a bronze fibula (Pl. I, 1) of La Tène III type, comparable in size and form with a fibula from Old Sarum¹ except that the bow-section of the Old Sarum example is lozengewise, while this is square. The Old Sarum fibula was dated to the first century A.D. which could be the date of this one, though the coins may be somewhat older. Three of the coins are latter-day bronze copies of the Westerham staters varying considerably in style and weight, but all showing evident signs of silver plating (Pl. I, 2-4). They weigh 48.6, 42.9, and 40.5 gr. respectively. The fourth (Pl. I, 5) weighing 4.7 gr., is a small base silver coin of the type (Evans M 13, 14, Mack 319) usually considered to derive from the Sussex gold quarter-stater (Evans E 9, &c., Mack 40, &c.) though in some respects the silver coins seem less devolved than the gold. They have been recorded, from Hengistbury Head,² about a dozen; from Holdenhurst (South Hants hoard),³ nine specimens; Maiden Castle,⁴ six specimens; Jersey,⁵ one or possibly six specimens; and single examples from Badbury Rings⁶ and Broadwindsor⁷ in Dorset, Bapton⁸ and Hanging Langford Camp⁹ in Wiltshire, and Portsmouth,¹⁰ as well as the present specimen in Hampshire. Sir John Evans possessed another unlocated specimen which he believed came from Dorset or Devon.¹¹ A different silver coin (Mack 320) with obverse a star of five curved rays and a reverse design clearly based on the Durotrigic silver quarter-stater, is an even rarer type. Specimens have been recorded from the 1875 Jersey hoard,¹² the Holdenhurst hoard,¹³ and two from Hengistbury Head.¹⁴

Both these types, having occurred in Jersey hoards, must have been in production before 50 B.C. when Caesar finished the war in Gaul. Mlle Monique Mainjonet of the *Cabinet des Médailles* kindly showed me the coin from the Jersey hoard of 1875, which Muret¹⁵ and de la Tour¹⁶ had recognized as

¹ *Arch. Journ.* civ (1948), p. 131 fig. 3d.

² J. P. Bushe-Fox, *Excavations at Hengistbury Head, Hampshire in 1911-12*, 1915, p. 68.

³ *Num. Chron.* 1911, p. 53, pl. iii, 9, 10.

⁴ R. E. M. Wheeler, *Maiden Castle, Dorset*, 1943, p. 331, pl. xxxviii, nos. 6-12.

⁵ *Rev. Belg. de Num.* ciii (1957), pp. 65, 71, pl. vi, 605, 606 and cv, 1959, p. 55, pl. vi, 1619. I am inclined to regard all the five specimens listed in vol. ciii, though silver, as being debased Sussex coins (Mack 43, 44).

⁶ R. P. Mack, *The Coinage of Ancient Britain*, 1953, p. 102.

⁷ J. Evans, *Coins of the Ancient Britons*, supplement 1890, p. 470.

⁸ *Wiltsh. Arch. Mag.* xliii (1927), p. 140, *V.C.H. Wiltsh.* i, part I (1957), p. 129. Now in Salisbury Museum.

⁹ *V.C.H. Wiltsh.* i, part I (1957), p. 108.

¹¹ *Ibidem.*

¹⁰ Evans, *op. cit.*, p. 470.

¹² *Rev. Belg. de Num.* 3rd ser., ii (1884), pl. v, 7. H. de la Tour *Atlas*, 1892, pl. xxvii, 10407.

¹³ *Num. Chron.* 1911, p. 53, pl. v, 15.

¹⁴ Bushe-Fox, *op. cit.*, p. 67, pl. xxxii, 24.

¹⁵ E. Muret, *Catalogue des Monnaies Gauloises*, 1889, p. 253, 10407.

¹⁶ De la Tour, *op. cit.*, p. 5.

having a *profil barbare* on the reverse. The flan is thicker and larger, and the design better executed and better struck than in the case of the Dorset coins. There is an inscription between 3 and 5 o'clock on the reverse, represented in de la Tour's fig. 10407, which has not as yet been read. More precise dating of the Durotrigic silver issues (Mack 319) is almost impossible to discover. Admittedly they are found in late contexts, but never in sufficient numbers to give reliable statistics. Furthermore, in many cases their condition has been very poor, denoting long circulation, and their variation in weight, size, and degeneration also points to a long period of issue. Presumably this overlaps the issues of their golden Sussex parallels—coins which by their presence in the Carn Brea hoard¹ must be dated to the earliest period of gold currency in the British Isles, as that hoard was rich in 'Bellocian' staters and quarter-staters. No staters of the Sussex type exist, so that it is tempting to think of them and the Durotrigic coins as separate currencies of which the so-called quarter stater and drachma were the units. Possibly this coastal currency is a two phase affair, gold coins being copied in Sussex and silver coins in Dorset, where with Somerset, Gloucester, and Wiltshire there was always a tendency towards the cheaper metal.

The design and prototypes neither of the Sussex nor the Dorset coinage have ever been satisfactorily explained. The obverse has been interpreted as a boar, a wolf and twins, or a ship under sail, according to the direction of vision. The reverse, of which the dominant feature is a line with a step in it, has, apart from Muret's rather vague description '*profil barbare*', defied interpretation altogether. It is usually illustrated horizontally, but if seen vertically it becomes the essential shape of a seated figure, and this is surely what in fact it is, the figure of Zeus enthroned, on the drachmas of Alexander III (Pl. I, 12), in the case of the silver coins, and the seated figure of Athene or rather her seat, on the gold staters of Lysimachus of Thrace (Pl. I, 6) in the case of some of the Sussex coins, while the rest seem to take the Zeus figure from the silver coins. Copies of both types were made by the Celts of the Lower Danube.² An example of the Lysimachus copy has even been found in the Rhineland³ (Pl. I, 7), while coins often typologically indistinguishable from the Sussex quarter-staters are found in the Boulogne area.⁴ The geographical gaps are therefore small, while the typological links, though they may have to be stretched, seem nevertheless to hold. Various details tended to gain in importance in the eyes of different barbarian die-sinkers, even to the exclusion of the throne, and so we find the circular and square monograms in front of Zeus (Pl. I, 13) duplicated as ornaments on certain late (?) Sussex coins (e.g. Mack 38, Evans M 12 and *B.N.J.* xxviii. 446, fig. 8) though the central ornament is traceable to the Athene figure (cf. Pl. I, 18 with 10) and not to Zeus. On the Dorset silver coins the seated figure is invariably preserved, the throne being indicated by parallel dotted lines. Several Sussex gold coins which owe more to Lysimachus than to Alexander illustrate the figure, often resembling a dagger handle, taking precedence over the throne, which becomes a mere crooked line in the base (Mack 39,

¹ W. Borlase, *Antiquities of Cornwall*, 1769, p. 259, pl. xxiii, 1, 2.







² L. Lengyel, *L'Art Gaulois dans les Médailles*, 1954, pl. xlv, 538 and 540-3.

³ *Ibidem*, pl. xlv, 537.

⁴ De la Tour, *op. cit.* 8538, 8611, 8722, 8729, 8731, and 8732.

with schematized obverse; **Pl. I, 8**), and sometimes it appears to be the winged Victory held by Athene rather than Athene herself, which becomes the central feature, as suggested by Derek Allen¹ (Mack 41 and 42; **Pl. I, 11**). Having postulated a seated figure for the reverse, the obverse, unless obviously schematized, ought to represent the head of Alexander the Great, either as Heracles wearing a lion-scalp, or as horned Zeus, but though this is not such a far cry as might at first appear it may not be the correct interpretation. In the coin illustrated by Mack (319; **Pl. I, 15**) a head facing left is easily recognized, while on the reverse, taking the right-hand side as the top, even the circular and square monograms are visible to the right of the knees of Zeus. In fact, unless quite an early date can be given to the heavier Dorset specimens it is difficult to understand how they often preserve the Alexander type considerably better and more consistently than the Sussex gold series preserves the type of Lysimachus. There are at least eight main varieties of the Sussex coins of this class (e.g. Mack 38, 39, 40, 41 and 44, B.M. 753 and 762 (both unpublished) and *B.N.J.* xxviii, 446, fig. 8; **Pl. I, 8, 10, 11, 16-21**; figs. 20 and 21 show only minor variations).

To return to the obverse and its possible representation of a head; on many of the gold coins and all the silver there is a central oblong feature, smooth on the right and serrated on the left (**Pl. I, 16**). This may represent the upper contours of a face as seen looking to the left. A parallel form of devolution towards a purely geometric figure took place with the silver dirhems of the Hephthalite kings in north-west India. The result (**Pl. I, 24**) was not unlike the figure in the centre of the British coins, but in the Indian series the whole process of degradation can be traced. Certain Sussex gold coins seem to duplicate the serrated oblong figure, so that two saw-like objects, back to back, face outwards (Mack 40; **Pl. I, 17**). It has already been noticed that duplication occasionally took place on the reverse (Mack 38, Evans M 12, &c.; **Pl. I, 18-21**), and whether or not the artist of these obverses knew he was making a janiform head, that seems to be what in fact he achieved. It had already been done by the Danubian Celts to the tetradrachms of Philip II.²

The clues for dating the earlier links in the chain are rather more plentiful but hardly more conclusive. There is a well-known series of semi-barbarous tetradrachms, bearing the name of Philip Aridaeus (323-316 B.C.) with the monograms   in front of Zeus and  beneath his throne (**Pl. I, 13**). Müller gives³  , also combined with , as a more orthodox version on tetradrachms of Philip III, but neither the coins nor their mint have been traced. Nevertheless it is from this source, as mentioned above (p. 2) that all British silver and some of the later gold coins under discussion are likely to stem.


The barbarous gold staters which copy those of Lysimachus have been dated by Schwabacher⁴ to the first half of the third century B.C. A similar coin in the British Museum is surprisingly dated on the reverse $\epsilon\tau\omicron\gamma\varsigma$ IB,

¹ *B.N.J.* xxviii (1957), pp. 444-5.

² Cf. R. Forrer, *Keltische Numismatik*, 1908, tafel xxxvi, 328.

³ L. Müller, *Numismatique d'Alexandre le Grand*, Copenhagen, 1855, pl. xxviii, 93.

⁴ W. Schwabacher, *Antik Barbarmyntning Belyst av Svenskt Material from Fornvännan*, 1952, summary, p. 275.

while on the obverse the monogram  under the head seems to point to the Chersonese mint (Pl. I, 22). Another Chersonese gold stater in the British Museum, of Roman inspiration, is dated in the same manner (Pl. I, 23), and if the Chersonese era is to be inferred, the twelfth year indicates 24 B.C., a date too late to be easily acceptable.

This conflict of dating evidence is perhaps emphasized in the case of a small gold coin from Armorica, illustrated by Lengyel¹ (Pl. I, 26). There can be little doubt that this coin is copied almost at first hand from the silver coins of Pharnabazus in Cilicia (413–374 B.C.; Pl. I, 25).² The head of Arethusa, facing, has hardly changed, but on the reverse the helmet of Ares has become a boar with the front leg forming his nose, while his chin and mouth are formed by a dolphin-like animal. His eye is drawn between the boar's legs, and a second sea-monster balances the new pattern. The devolution of the Ares-head may possibly be traced in the reverse of a billon coin in the 1875 Jersey hoard, illustrated by de la Tour³ (Pl. I, 27) but here the boar takes precedence over the other features of the design, and if the head of Arethusa is represented by the symmetrical equine design of the obverse it is not a flattering portrait.

The common origin of the British gold and silver coins from Sussex and Dorset has been assumed largely because of the persistent crooked line on the reverse and also because of the enigmatic obverse design, here suggested as being a head, which occurs on so many of both the gold and silver series. Yet the connexion as shown above may well be illusory and an examination of the gold series, particularly those from the French side of the Channel, provides further evidence to the contrary. We find for instance that the upright seated figure of the silver coins, recognized by Muret as such, and here considered to be Zeus enthroned, is never present on the gold coins from across the Channel. Instead we find that the earliest of the gold coins is likely to be Mack 39 (Pl. I, 8) which in its reverse compares very closely with Lengyel 537 (Pl. I, 7) and also with de la Tour 8731 (Pl. I, 9). Mack 39 is of extreme rarity, which may excuse it for having been found in England and not, so far as I am aware, in France. The French-found coins of this early group are illustrated by de la Tour⁴ and are connected with Mack 39 by various arrangements of circles on the obverse and no sign of the figure which later appears on both Sussex and Dorset coins. This fact would agree with an early date for the silver coins (Mack 320; Pl. I, 14) with a star-fish design on the obverse. We come then to the conclusion that the design which occurs on all the later silver and many of the later gold coins is an intrusion which, though possibly inspired by a human head, need not be closely related to the true prototypes of these coins.

To summarize, it may be said that the gold Sussex coins are copies of the staters of Lysimachus though 'Zeus' appears on certain issues, while the silver Dorset coins come from the silver coinage of Philip Aridaeus. The silver coins were in circulation before 50 B.C. and the gold considerably earlier. Closer dating is not yet possible. They may represent local currencies of which the 'quarter-stater' and the 'drachma' were units. The date 50 B.C. is

¹ Lengyel, *op. cit.*, pl. xviii, 207.

³ De la Tour, *op. cit.*, pl. xxvii, 10390.

² *Num. Chron.*, 1922, p. 171, no. 57, pl. vii, 12.

⁴ See p. 2, n. 4 *supra*.

also appropriate for the Godshill hoard, since a Durotrigic stater 'of billon or even perhaps copper' dipped in silver and weighing 5.7 gm.¹ was found in the Jersey hoard of January 1957.²

PLATE I

Nos.

- 1-5 The Godshill fibula and hoard.
 6 and 7 Lysimachus stater (B.M.) and copy from the Rhineland (Paris 9603a, Lengyel 537).
 8-11 Sussex and Gallic derivatives: ((8) B.M. 763, Mack 39; (9) Paris 8731; (10) B.M. 762; (11) B.M. 784, Mack 41).
 12 and 13 Alexander III drachma (B.M.) and Philip Aridaeus barbarous tetradrachm (B.M.)
 14-17 Dorset silver derivatives, ((14) Paris 10407; (15) B.M. 1135, Mack 319 and Sussex gold derivatives; (16) B.M. 800, Mack 44; (17) B.M. 803, Mack 40).
 18-21 More Sussex gold derivatives; 'facing figure and monograms'; ((18) B.M. 753; (19) B.M. 754, Mack 38; (20) Canterbury Mus., B.M. electrotpe, *B.N.J.* xxviii, 446 fig. 8; (21) B.M. 761, Evans M 12).
 22-24 Tauric Chersonese staters: ((22) B.M.; (23) B.M.); and N.W. Indian coin with 'geometric' head, obv. only: ((24) B.M.).
 25-27 Pharnabazus tetradrachm (B.M. *Num. Chron.* 1922, pl. vii, 12, Weber 7616) with Armorican gold (Paris 6921a, Lengyel 207) and Jersey hoard (Paris 10390) silver derivatives.

The reverses of 20 and 21 and the obverse of 27 are placed to show suggested derivation rather than the supposed interpretation of the die-sinker.

I am greatly indebted to Mr. H. S. W. Edwardes the owner and Mr. J. W. G. Musty the excavator for allowing me to publish the Godshill coins; also to the British Museum and the Bibliothèque Nationale for providing casts for the plate and other assistance.

Mr. Edwardes has now presented the coins and the fibula to the Salisbury and South Wilts Museum.

¹ 88.6 gr.

² *Rev. Belg. de Num.* ciii (1957), p. 65, pl. vi, 604.

THE TWO PRIMARY SERIES OF SCEATTAS¹

By S. E. RIGOLD

THIS investigation began when, by the good offices of my colleague Mr. G. C. Dunning, Mr. R. H. M. Dolley, Mr. L. R. A. Grove of Maidstone Museum, and Dr. and Mrs. H. M. Raven of Broadstairs and I had the opportunity to examine two small hoards of sceattas, which, though discovered and briefly recorded some decades ago, had never properly been described. Both (nos. I and II in Appendix F) comprised two types only:

A (*B.M.C.* 2*a*): radiate bust; in front of face- Γ IC / standard with recognizable votive inscription.

B (*B.M.C.* 27 (*a* and *b*—the distinction is shown below to be of small significance): diademed head or bust / bird on cross.

Afterwards, by courtesy of Mr. L. Helliwell of Southend Museum, I examined another hoard (no. VI), again only recorded in general terms, which contained, beside these types, a third, clearly stemming from A:

C (not distinguished in *B.M.C.* from other Runic varieties): as A but with 'æpa' in Runes, in place of the IC of Γ IC.

Then, most opportunely, thanks to Mr. G. Teasdill and Messrs. Grantham of Driffeld, a fresh hoard (no. VIII) was brought to my notice, here described for the first time, apart from Mr. Teasdill's local report; it was of more various composition, but contained an evolved form of type B, and is significant as a terminal point.

These led me to the published records of other finds of similar composition, one of which (no. VII) was found to be intact, and to comparable material in public and private collections, in which pursuit I am most grateful for the help and co-operation of the Ashmolean, British, Canterbury, Hunterian, London, and Norwich Museums, the Royal Cabinet at The Hague, and the Cabinet des Médailles at Paris, and of their curators, as well as of Messrs. A. H. F. Baldwin, C. E. Blunt, F. Elmore Jones, Commander R. P. Mack, and Mr. and Mrs. J. R. Pritchard, and of the principal London coin dealers. For freshly excavated material and for information about discovery in advance of publication I am indebted to Miss V. I. Evison, Mrs. S. Hawkes, Mr. C. Green, and Group-Captain G. M. Knocker.

It was at once apparent that types A and B were broadly contemporaneous and antedated all or most other varieties of sceat, and that they had a strongly Kentish distribution, associated with burials in a pagan manner. The hoards in question provide the soundest base of known fact from which the whole problem of sceattas may be reappraised. Only the appearance of the 'London' type and the Thames hoards² offer a comparable security for the later sceattas. This study only concerns the earlier phase.

¹ A list of abbreviations will be found after the text and before the Appendixes.

² At least two hoards, but differing little in composition: one (1860) = *I.B.C.H.*, no. 252, all

Previous Studies

Considering the importance of these coins in a larger archaeological context, they have received surprisingly little attention. Fortunately two such giants at J. Y. Akerman and C. Roach Smith lived in the days of railway-building and miscellaneous collection. To CRS¹ we owe the only two hoards (nos. III and VII) to be recorded in detail, as well as several other find-spots, to JYA² by his careful republication of pagan Saxon material, at least the negative evidence that nothing else was known to scientific recorders. Little more followed except C. F. Keary's *B.M.C.* and a general discussion by G. Baldwin Brown,³ until the valuable studies by the late P. Le Gentilhomme,⁴ with whom I am in almost complete agreement, by Dr. C. H. V. Sutherland⁵ and Col. N. T. Belaiew⁶ on distribution, and by Mr. P. V. (Blake-)Hill, on typology.⁷ These are pioneering studies and I beg their authors' patience if I repeat much of what they said, while radically revising other parts. Mr. Hill's assessment of the Frisian evidence is particularly useful.⁸

Discovery and Distribution in England

The hoards are given in detail in Appendix F. Of the eight certain hoards and one probable, with recorded provenances, five are definitely from graves and there are variously strong reasons for suspecting that this may be true of all except no. IX. A revised list of finds of single coins and pairs, of types A, B, and Pada, follows in Appendix H: here again there are several instances of grave-finds. Even when the exact circumstances are unknown the names of Christian sacred sites—Bradwell, Burgh Castle, Minster, Reculver, Richborough, Whitby—are prominent among the provenances of these and allied types, and where evidence is available it points to the church or cemetery. Nor was the practice confined to England; the second-hand, but eminently credible, report of Mej. de Man locates at least two hoards from Domburg (Walcheren) in a cemetery disturbed by sea-erosion.⁹ In most cases the coins

or most in BM (*B.N.J.* xxviii (1956), p. 36: R. H. M. Dolley, 'Coin Hoards from the London area', in *T.L.M.A.S.* xx (1960), pp. 41, 47); the other in AM, ex Evans and Franks. Those reported by CRS in *C.M.L.A.* and *C.A.* ii, p. 168 look too diverse to constitute one hoard.

¹ There have been, at most, two or three English archaeologists to compare with him since, in breadth of experience, including numismatics. The value of *C.A.* is incalculable and his drawings identify individual scattered coins beyond question.

² Especially in *Remains of Pagan Saxondom* (1855). He gives an independent report of Hoard III. He was the first secretary of the (Royal) Numismatic Soc.

³ *A.E.E.* iii, pp. 56–113. Although flowery and discursive, this has been the most readily available source for much important material. The value of his comparisons of the later, more Teutonic designs with other genres is vitiated by the wildest chronology (e.g. sceattas allotted to the sixth century). I prefer Mrs. Morehart Baker's more modest study of the same material, which led her patiently and surely to the eighth century, and which she has kindly communicated to me.

⁴ Especially 'La circulation des Sceattas dans la Gaule Mérovingienne', in *R.N.* ii (1938), pp. 23 ff., translated in *B.N.J.* xxiv (1944), pp. 195 ff., and reprinted in *Mélange de numismatique mérovingienne* (1940).

⁵ *N.C.* ii (1942), pp. 42 ff.

⁶ *Seminarium Kondakovianum* (Prague), viii (1936), pp. 193–219.

⁷ *B.N.J.* xxvi (1951), pp. 129 ff. (1952), pp. 251 ff., xxvii (1953), pp. 1 ff.; also *N.C.* xiii, pp. 92–114, for unrecorded types numbered in continuation of *B.M.C.* series.

⁸ 'Anglo-Frisian Trade in the Light of Eighth-century Coins' in *T.L.M.A.S.*, xix (1958), pp. 138–46.

⁹ 'Que sait-on de la plage de Domburg?' in *Tijdschrift v. Munten en Penningkunde*, vii (1899–1900). See page 32, also plans.

are unmounted and to be distinguished from coin-pendants. Where noted, they lie beside or beneath the body, perhaps in a purse. It is significant that they occur with ornaments, but (with one uncertain exception)¹ never with weapons, other than small knives. I suggest that they represent the purchase-price paid by someone who had acquired arms or other costly possessions of the deceased *d'occasion* and were buried so that the ghost should not feel he had been robbed. Certainly coins are among the most lingering of grave-goods or substitutes for grave-goods; their deposition outlasts the abandonment of pagan-type cemeteries.

The hoards are all small: one consists of twenty, three of eight (but one of these may originally have been twenty), and two of five. Those from Domburg were of twelve and six respectively. The precise significance of these clearly intentional sums is beyond conjecture. Twenty was a Kentish shilling,² but there were other sums of account and round figures are to be expected if the internal function of money was chiefly for legal and ceremonial payments, including nominal valuations of grave-goods.

Appendix G contains details of three die-linked runs of coins of both types, A and B, each perhaps totalling twelve, and with a similar coloration, which appear either to be intact hoards or samples from larger hoards. That in the Hunterian Museum, and untouched since the eighteenth century, is of almost identical composition with another from the Barnett collection. The third, from the *ancien fonds* of the British Museum, is apparently a shade earlier. It, or all of them (?), may come from one of the (two?) late eighteenth-century hoards from Thanet. There are many *early* coins of both types in nearly mint condition, and it does not look as though all came to light at the same time.

All the fully authenticated hoards consisting of types A and B only are from Kent—more precisely from East Kent (archaeologically a far more distinctive region than the whole county). The proportion of the types in all the hoards approaches that of two of A to three of B, a fact which would of itself suggest that the hoards were concealed within a short period. The two (nos. VI and VII) containing the earliest Runic coins (type C) are scarcely of wider distribution—Birchington, Kent, and just over the Thames in Essex. There is nothing to suggest that this early group of Runic coins is other than of Kentish or possibly East Saxon origin, but the presence at Birchington of an almost certainly Netherlandish imitation (R3) of these implies that sceattas were already travelling widely. It is possible then that *all* the English Runic pieces (except of course Pada's) are East Anglian. The latest hoards (VIII, IX) are much farther-flung, their composition more various, and the Runic

¹ Two sceattas and a spear-head from Out Elmsted in Barham, Kent. The spear-head remains; the sceattas have not been traced and no one who saw them when they were briefly exhibited during the war can describe them.

² So in the seventh-century laws: a freeman's wergild was one hundred, which was advantageous in comparison with its West-Saxon equivalent of two hundred shillings of five pence each. Notice, there is one Kentish hoard of five. See H. M. Chadwick, *Studies in Anglo-Saxon Institutions*, pp. 78 ff. The Kentish shilling was theoretically a gold shilling, to be compared with the gold solidus, tariffed at forty denarii, that subsisted as a money of account among the Franks. At this rate the comparable silver shilling, if there was any parity with the apparent usage of Franks and Allemani in the mid-eighth century, should have been six pence or sceattas: in fact, it seems to have been four (Chadwick, *op. cit.*, pp. 17 ff.), which fits the hoards of eight well enough.

content more warrantably East Anglian. The final criterion of East Anglian mintage is the Cambridge find (IX).

The single finds tell much the same story. Coastwise movement of type B to Selsey and Caister-by-Yarmouth only brackets the point of distribution which is reinforced by Akerman's testimony that both were frequently found 'in East Kent, especially the neighbourhood of Canterbury',¹ and by the many specimens in the Ashmolean that derived from the Rolfe collection, which was formed in Sandwich, largely from local material. The only real outliers are Compton, Staffs. (A) and Ilchester (B).

The recorded Runic finds are more difficult to appraise, partly because the *B.M.C.* classification is inadequate. As will be shown below, there are three main classes, but the available descriptions may not distinguish them:

- R1. Primary Runic pieces (type C)—distribution centred on the Thames estuary.
- R2. Secondary Runic pieces, including, as Mr. Hill observes, the so-called *B.M.C.* type 2b; usually much lighter—distribution almost exclusively East Anglian and never found in Kent.
- R3. Low-country imitations of R1, with a different (cross-and-pellets) reverse, including the so-called *B.M.C.* type 2c; of good weight—overwhelmingly the commonest Runic type from every continental source; the few English finds are scattered but not particularly East Anglian.

The large continental hoards will be considered later, but the single finds on the mainland coast do not alter the picture. Both A and R1 have occurred at Domburg² and Duurstede,³ B at Domburg,⁴ and at Utrecht,⁵ and R1 at Domburg.⁶

Another type from Domburg is *B.M.C.* type 37.⁷ A Frisian origin has been suggested for this, but it is quite unequivocally a domestic derivative of type B and has a similar coastal distribution centred on Kent—Dale Hill near Brighton,⁸ to Caister-by-Yarmouth.⁹ The general pattern is this: types A, B (including *B.M.C.* 37), and R1, originating in or near Kent, with a wide coastal movement on both sides of the sea; R2, East Anglian and less exportable.

Sources of the Types

Both types A and B have a high degree of uniformity within the issue: in the case of A no more variation than would be expected in any hand-made coinage, in B a longer evolution and what looks like a deliberate and controlled differentiation in minutiae. In either case there is a marked contrast

¹ *Arch.* xxx (1844), p. 56.

² *R.B.N.*⁵, ii (1870), pl. F, nos. 9, 10, 11 (all subtype A3), and 6 (subtype R1). Compare *D.G.M.M.*, no. 5825.

³ *R.B.N.*⁵, ii (1870), pl. E, nos f. (A3) and e (R1).

⁴ Several, mostly middle period (B II); see Appendix E.

⁵ A. E. v. Giffen, Vollgraff and Hoorn, *Opgravingen op het Domein te Utrecht*, iii, p. 115, fig. 72 (late-B IIIa, 8/ii).

⁶ *R.B.N.*⁵, ii (1870), pl. F, no. 12 = *D.G.M.M.*, no. 6215.

⁷ Quoted by Mr. Hill (*T.L.M.A.S.* xix).

⁸ Coin in Brighton Museum, doubly pierced.

⁹ Excavated by Mr. C. Green; from the cemetery, perhaps in the top-filling of a grave, but not with the body (16.2 gr./1.05 gm., a very typical weight).

with later issues of sceattas, where the die-sinker could indulge his fancy more freely.

Both types show, at least in their earlier stages, a depth of relief and a sculptural quality unusual in sceattas and rare anywhere in the Anglo-Saxon coinage, apart from Offa's. The sharp and precise technique differs from the gentle rotundity of many later sceattas, and punches were evidently employed for the smaller details. The technique looks backward to that of the finest thrymsas and contrasts with the scratchy engraving of most other thrymsas, whether English or Frisian.

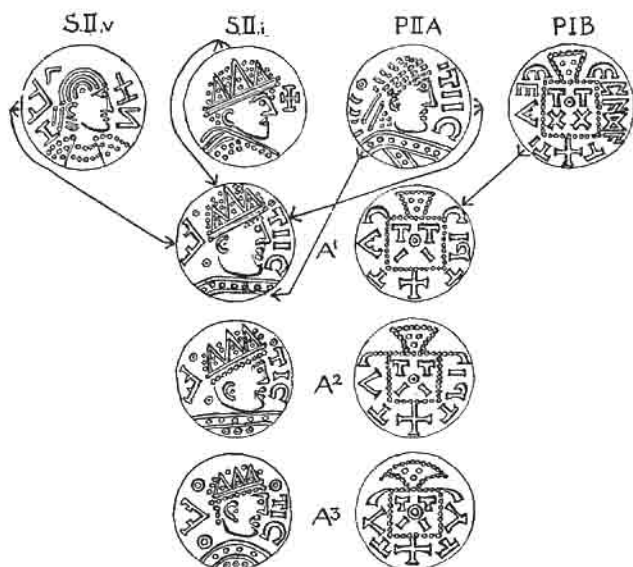


FIG. 1.

Type A is a remarkable eclectic design, composed of elements taken, almost without alteration, from four different types of electrum thrymsa (see Fig. 1): the curious, large, broken 'A', behind the bust from the relatively common 'two emperors' type (Sutherland,¹ II, v,—all references are to tremisses only); the radiate crown with pellets from the now rare 'Carausius' type (Sutherland, II, i); the drapery and the inscription before the face from one Pada type (P II) and the standard reverse from another (P I), replacing 'pada' by 'PI'. The treatment of the features and the use of pellets is common to all these (except the worse examples of II, v), suggesting a common place of origin, for which distribution would point to Kent. (The most plausible alternative, London, has little to commend it, since the fabric of all certainly London pieces is quite different; East Essex is just possible and the possibility applies also to type A and, with a little more force, to type C.) But the implications of the type A design are wider than this; not only were the component types current simultaneously in the same area but they had suddenly ceased to be readily available and type A was introduced deliberately to combine the goodwill of them all. It is a 'restored' currency, almost in the

¹ *A.S.G.C.* x (catalogue of all types); the large A, with the rest of the so-called inscription on type II, v, comes not from a Roman prototype but from Frisian issues, as *A.S.G.C.*, pl. v, x.

Roman sense; only the metal is poorer. The component types will be discussed in more detail below.

Type B on the other hand has no precise antecedents. To call it 'Anglo-Merovingian' only does it partial justice. The generalized late-Roman head, with a straight double diadem, is only equalled on the finest Austrasian tremisses (of Metz, &c.). The weather-cock bird found on a small group of tremisses attributed to Laon¹ is not very like the neat bird-on-cross of type B; if a prototype must be sought, it could be the transformation of the Parisian *croix-ancrée*, or the upending of a cross to expand the globe beneath it into the round-cropped bird, but I prefer to regard the design as original. The bird is of no recognizable species: stylized doves and peacocks are at home in sub-antique sculpture—the bird does not come from the bestiary of Teutonic *Tierornamentik*. The transformation of the inner ring into a serpent is also unprecedented. On one, not certainly the earliest, piece (B 1E, 1), the reverse ring has the 'vertebral', as distinct from pearly, form found on a few tremisses of Metz² and vicinity, which may have suggested a serpent. The inner ring on this side, in genesis a wreath, calls for no comment, but the obverse inner ring is exceptional at this date: a few late Visigothic pieces, similar pieces, with facing busts, from le Puy-en-Velay³ (an interesting connexion because the type may have influenced *B.M.C.* type 37), and tremisses probably from Antre (Savoie),⁴ are apparently the only continental examples; but there is an English precedent on the strange and badly engraved thrymsas with Runic or Latin reverse legends (Sutherland, I, vi), absent from Crondall, but early if the metal is anything to go by. I suspect that there may have been better pieces of this kind, and that the inner ring is in origin a nimbus. Their general resemblance to type B is slight.

The Post-Crondall Thrymsa Coinage



S.I, vi

S.II, i

S.II, ii

S.II, iii

S.II, v [all B.M.]

FIG. 2.

Omitting the York group (V) and the very dubious miscellanea grouped as VII, only the following varieties of thrymsa in Dr. Sutherland's corpus are unrepresented in the Crondall hoard:

I, i—the unique EVSEBII/DOROVERNIS piece.

I, vi—the difficult pieces with the nimbed (?) head, mentioned above.

¹ *D.G.M.M.*, no. 2110 = *M.M.B.N.*, no. 1051—still less like the Cahors bird (cf. *M.M.B.N.*, 1921–7). ² *D.G.M.M.*, nos. 2950, 2953–6, 2958, *M.M.B.N.*, no. 933–5; all of Theudelenus.

³ Engel and Serrure, *T.N.M.A.*, fig. 254.

⁴ *D.G.M.M.*, no. 231 = *M.M.B.N.*, no. 1260.

II, i—'Carausius' type.

II, ii—so-called 'Constantine' type, with the lyre-shaped object on reverse.

II, iii—'Crispus' type, with runes, apparently 'deliana'.

II, v—'Two emperors' type.

VI, iii—Pada, an inadequate selection. Besides expanding this representation, another type can be added, in sequence to Dr. Sutherland's numbering:

II, vi—the type numbered 55 by Mr. Hill, in sequence to *B.M.C.*,¹ certainly occurring in pale gold; helmeted bust in *toga picta* r., shouldering cross-staff/cross in wreath.

All these types except the first two are in *pale* gold, the two last sinking to silver, and must be placed *after* Crondall. There is already a hint of debasement in one or two of the Crondall pieces, and the interval need not be long, since one Crondall type (II, iv—'Licinius') would appear to be the immediate precursor of II, iii. Crondall may in fact be a 'debasement hoard'.

I, i and I, vi are anomalous and perhaps pre-Crondall. At least the reverse inscriptions of I, vi seem to be sense, if only they were complete—BERN . . . and apparently two abbreviated names in runes. The obverses have ✕CHVOT . . . and . . . TARE . . . It is tempting, remembering that Hlothre (Chlotarius) reigned in Kent from 673 to 685, to put these together as CHLOTARE, but it must be resisted.

II, i and II, v, are among the ingredients of type A. Their treatment (e.g. of the nose) is closer than might appear at first. Neither is more than distantly inspired by its Roman prototype. II, i has a probable Kentish provenance (Strood);² II, v, occurred at Reculver³ and Lympne.⁴ II, v was also found at Domburg,⁵ while specimens of both in old continental collections suggest further exportation, as does the piece in the Bordeaux hoard, reproducing the reverse of II, v (rather than vice versa). Whether there are reasons, other than decorative, for the *concordia* motif of both types is unknown. II, v was a large coinage, getting progressively paler; Dr. Sutherland has noticed twelve obverse dies—there are at least two more.⁶

II, ii, with its triple-beaded ring,⁶ is allied to II, iii and to the Crondall type II, iv, but the design is closer to the 'monstrance' type of Rouen⁷ than to anything of Constantine's; this would appear to be the source of the raised hand, holding a cross, on the obverse and the lyre-shaped object on the reverse.

¹ *N.C.* xiii (1953), p. 108, pl. vii, 1; *B.N.J.* xxvi (1952), p. 268, pl. iv, 7—as 'London-connected', which it certainly is not.

² *A.S.G.C.*, note to 23a. There was a cemetery at Strood (*V.C.H. Kent*, i, p. 377; *C.A.* v, p. 129. *A.C.* ii, p. xli).

³ *CRS, R.R.L.*, pl. vii, 10; *AR.* pl. vii; *F.Syll.* no. 218. It is from yet another pair of dies. Another probable Kentish find-spot is the Maidstone-Hollingbourne area—coin in Maidstone Museum, ex Pretty coll. (18/9/1-22) with strong presumption of local discovery (similar to, but not identical with, to *A.S.G.C.*, no. 43).

⁴ *B.M.C.*, no. 4, see *B.N.J.* xxviii (1956), p. 36. Acquired in 1854 from Mr. Hills, doubtless W. Hills, curator of Chichester Museum, who had acquired, and perhaps excavated himself, many grave goods from a cemetery at Bellevue, Lympne, c. 1828 (*R.R.L.*, pp. 263-4). This is surely the source; were there more?

⁵ Two examples; *A.S.G.C.*, note to 33a.

⁶ *BM*, ex Montagu and Wigan. Observations on the odd type in *A.E.E.* iii, p. 88.

⁷ *D.G.M.M.*, nos. 3812-17.

Another link with Rouen occurs in II, vi, which actually occurred in the Rouen hoard. Prou and Le Gentilhomme¹ have suggested that the type might be English, and Mr. Hill admitted some examples, on grounds of workmanship. But there is a continuous gradation of fabric; if one is English they all are, and the technique is precisely that of II, ii, II, iii, II, v, and VI, iii—note the use of annulets and concentric semicircles. Apart from the helmet, the obverse stems from a fifth-century consular solidus (Leo?);² but the reverse changes from a long cross, flanked by the now meaningless CA, to the Rouen type of a short expanding cross in a wreath.³ What prevents their ascription to Rouen or any other Frankish mint is the obverse inscription: 'OTIANTUS' (Belfort) or 'OTAGIUS' (Engel and Serrure) are not only unidentifiable but in the nominative case instead of the regular locative or ablative—the O is a mere annulet and the inscription seems to carry over from the reverse, VANIMVNDVS MONE/TARIVS. This legend appears to be the prototype of the garbled versions on type B, which may stem from another type of the same moneyer. 'Vanimundus' is assimilated to 'Tuanimundus' by confusing the cross, or the V, with a T. Aunimundus would be a more normal name. That he was a Frank need cause no surprise; that he had no *civitas* as though potentially itinerant may be significant not only for the conditions of the Kentish goldsmithery in general, but for the tradition of personal responsibility and relative mobility that was to survive into the later Old English coinage. (Pl. II.)

Both the helmet and the general technique (note the use of annulet punches) of the finer examples of II, vi remind us of II, ii and of the type of Pada which provides the obverse of type A. In fact therefore, types A and B both evolve from the same inter-related groups of thrymsas—Frankish in fabric perhaps, but not particularly close to any Merovingian types or styles, and all (except a few of Pada's and of II, vi) having a visible gold-content, however small. Pada and closely related pieces will be considered separately.

The Coinage of Pada (Pl. II)

Of the recorded English finds one is from London,⁴ the rest all from East Kent;⁵ the collaterals and descendants of the coinage are tied to the same area, and it is here, surely, that Pada struck. The hoary argument that Pada was a Mercian, because Offa apparently imitated one of his standard types,⁶ would not be affected, even if it were valid, since Offa also used Canterbury. But the point is not worth making: to equate Pada with Peada is as unwarrantable philologically as it is chronologically.⁷

¹ *R.N.* i (1937), p. 81; compare Prou on *M.M.B.N.*, nos. 2730, 2731. Le Gentilhomme recognized the connexion between the legends on this type and on type B ('les fameuses sceattas a l'oiseau posé sur une croix'). Another resemblance with type B is in the light (c. 18.5/1.20) weight of most type VB.

² e.g. Sabatier, *Monnaies Byzantines*, pl. vi, 19; possibly Honorius (cf. J. W. E. Pearce, *Roman Coinage*, 364–423, p. 13, no. 9); but all these busts face left.

³ e.g. *D.G.M.M.*, nos. 3830–4, 3840, 3854.

⁴ *C.M.L.A.*, p. 107, no. 562 (not called Pada, but description adequate).

⁵ And all from cemeteries: Finglesham (pale gold), Sarre and Dover—two each. See Appendix A.

⁶ See *B.M.C.*, p. 1, note †.

⁷ I am assured by Dr. R. I. Page of Nottingham University that there are no certain examples of the rune here transliterated 'a' used for the reflex of the Germanic AU (which would normally produce EA in Old English).

Pada's coinage was a large one: of two dozen specimens I have examined, all but three (all silver) are from completely different dies. The coinage has been absorbed even more thoroughly than the nearly contemporary II, v, where die-links do exist. Furthermore, it covers quite a period of progressive debasement, starting at a lower standard than the highest of II, v. Three types are known, of which two have subtypes, the obverse of the earliest being substantially that of II, iii (the one example of which is slightly yellower than any Pada). The VOT inscription now appears for the first time as TOT, and *we must be prepared to read any T as V*.

Type P IA, helmeted head of mid-Constantinian form/'pada', in runes on standard, terminal cross ends in annulets (cf. II, iii).

Type P IB, same obverse/ votive inscription on standard, 'pada', in runes, at side, terminal cross plain, as on type B.

These types occur in electrum only and may begin before the other two. The retrograde obverse inscription is CNSI ATC, probably for CONST AVG? rather than the CRISPVS NOB CAES of II, iii, which better suits the VOT XX. which Crispus did not attain. Some of the letters of VIRTVS EXERCITVM come through.

Type P IIA, laureate bust, the wreath usually made with a special cloven punch used also on the reverse, the infulae prominent (again mid-Constantinian) / within a circle, 'pada', in runes, dotted line below, 'cloven' line above; outside the circle, the 'fantail' with three pellets, as on a standard. A variety, P IIB, made with the same cloven punch, has a cross on steps in place of Pada's name.

Both are found in silver. The complete obverse legend ends . . . ITNC i.e. IVNC, for (CONSTANTINVS) IVN N C? The interest in Constantinian types is maintained.

Type P III, diademed bust / plain cross, short at first, but longer on evolved dies, over saltire terminating in annulets, which finally get detached.

Two examples are in pale gold, the rest look like silver, and even that not of the finest (see following section). The arrangement of the pearls on the shoulder of the earliest specimen suggests a *late* fourth-century prototype, as do the legends on both sides, which appear to derive from Gratian or perhaps Valentinian. As the metal grows baser the legends are hacked down and the bust assumes a Visigothic aspect, imprinted with a cross or pellets, while the hair, with its fringe and curious lump over the forehead, foreshadows that of type B. A table of Pada's dies is given in Appendix A.

All the 'post-Crondall' coins, except the latest Pada and II, vi, show, *pace* Mr. Hill, a visible trace of gold. In view of the chemical analysis (see next section) the doubtful primacy in issuing sceattas should rest with Pada or possibly 'Vanimund'. But, though there was probably no change in denomination, there is a difference: while theirs are the exhausted end of a gold issue, series A and B would seem from their appearance not to claim to be more than silver. It will be suggested below that type A probably began a trifle earlier than type B (except perhaps B X). It is unlikely that the end of Pada overlapped with A and B; the designer of type A would hardly have made such

an odd use of Pada's motives while he was still in business, nor is there any hoard evidence that Pada's silver circulated in England with type A, though the weights would not have prevented it. Rather it would appear that Pada was faced with a crisis to be met by catastrophic debasement, and then all his coins, of whatever metal, were swept off the board and a fresh coinage issued, a process that could not be done by the statutory recoinage, as it was when a royal monopoly had been established; it indicates a second catastrophe.

The Metal of the Primary Sceattas

By courtesy of Mr. L. Helliwell and the authorities of the Southend Museum, Mr. Forbes, Deputy Warden of Goldsmith's Hall, has analysed the entire Thorpe Bay hoard (VI), which contains types A, B, and C. His findings are abstracted in Appendix I, but certain points are relevant to the argument here.

In hoard VI: (a) The composition of each type, admittedly not the earliest of A and B, is remarkably similar.

(b) The gold content is nowhere more than that of an impurity—it was neither visible to the eye, nor could it probably be detected or isolated by the methods then available. It is unthinkable that the moneyers would maintain a small gold content to satisfy their own consciences, when it could not be tested. Gold is not usual as an impurity in silver ores. The most likely reason for its presence is as a relic of base thrymsas melted down or imperfectly refined.

(c) The fineness of the silver exceeds the later sterling standard (in contrast to that of the secondary Runic coinage, R2).

(d) The scarcity of lead is consistent with what we would expect at this period, that the Welsh, West Welsh, and Midland mines, so important in the later old English coinage, were not yet exploited.

Mr. Forbes has also analysed the two Pada coins from the Dover cemetery, which Miss Evison has kindly submitted for the purpose. This is certainly a most useful check on the other evidence, since the coins are typologically 'gold' thrymsas.

The results confirm the visual appearance of the debased Pada coins: they are not merely silver, but bad silver. The gold content is as low as, in the case of the P III coin lower than, that of the subsequent sceattas, and the copper content, in either case, is far higher. Nothing could prove more conclusively that Pada's career ended in a panic debasement and that the 'primary sceattas' re-established credit.

Type A (BMC 2a, Brooke Class 5) (Pl. II)

This gives the appearance of a brief and intense issue, of extremely regular execution. It ceases abruptly and the Runic derivatives form a quite distinct coinage. There is one mint, one style, and very few contemporary imitations. In contrast with type B, there is no deliberate differencing of the dies, and the evolution in detail is of the simplest. Die-linking would be tedious and difficult, and I have not attempted it. But this uniformity is deceptive, as is

Mr. Hill's overall mean weight of 19.04 gr.¹ The weights are most revealing: there is a heavy and a light coinage as distinct as those of Henry IV. In all, four categories can be distinguished:

- A1, one specimen only examined (19.0 gr. / 1.23 gm.); legend still TIIIC (cf. ITNC or ITIIC on Pada, type II), crown high and close to thrymsa model, no pendant pearls, annulets small; 'fantail' of standard narrow.
- A2, legend TIIIC; crown moderate, few, or usually no, pendant pearls, features often negroid, drapery (a dotted band with annulets below) nearly straight; annulets in field small to medium; fantail narrow to medium. A sample of twenty-four coins in good condition showed an astonishingly regular weight (mean: 19.6 gr./1.27 gm.; mode: 19.5 gr./1.26 gm. standard deviation: 0.3 gr. each way, i.e. about 0.15 per cent. This is the full thrymsa weight, higher than either of the strictly maintained weights of type B. Twenty-two obverse dies appear to belong to this group, including one or two marginal ones.
- A3, legend as before; head and crown smaller and simpler, pendant pearls behind head generally conspicuous, 'drapery' in an arc; annulets medium to large, fantail much more spread. Weight more variable and definitely lighter, though perfect specimens are fewer; a sample of eight good ones produced;—mean: 18.8 gr./1.218 gm.; mode: 18.9 gr./1.225 gm. which is nearer to the lighter weight of type B (i.e. B IA) but there are a few around 17.45 gr./1.13 gm. Seventeen obverse dies detected.
- A4, imitations (un-English?), of good weight; a very rough thing from Richborough, and another with crosses on all four sides of the standard which allies it to one group of primary Runics; both weigh 18.9 gr./1.225 gm.

In the relatively early hoards II and III there is one, filed, example of A2 and the rest are all A3, but in the die-linked 'runs' type A2 predominates, while the type B coins are scarcely less advanced, though in fresher condition. Hoard I may lie between them, but the dating is close. The impression remains that the type A was issued in large quantity at the higher weight slightly before B, and very soon reduced to the standard of B, but that the hoards represented by the 'runs' were buried before the reduction. Most of A2 then disappeared. This has some bearing on the number of dies: in the certain hoards the proportion is roughly two of A to three of B, which matches that of the known A3 obverses (at least seventeen) to those of the earliest of series B (twenty-six?), with an adjustment for survivors of A2, whereas the total of A2 and A3 is at least thirty-nine, which would reverse the proportions (assuming the dies lasted about the same time).

The diameter (12–14 mm.) and thickness of type A, particularly A2, is visibly greater than the later thrymsas, as the same weight at a reduced specific gravity would necessitate. The dies seem to maintain the four alternative right-angled positions required by a square casing.

It is this moment of reduction, when the pretence of a gold tremissis is

¹ See table in *B.N.J.* xxvi (1952), p. 262. I have found this table very useful, but means are only really significant in the case of an absolutely freshly struck sample.

finally abandoned, that the sceatta, *i.e.* *denarius*, must be said to begin, and therein above all lies the primacy of types A and B. It may be that this was to prevent an outflow across the Channel and that the *saiga* was on its way to the weight of about 1.08 gm. at which Pippin the Short found it. English evidence may help to determine the stages in this reduction.

Runic Sceattas (type C, &c.)

The various coinages with Runic legends, or attempts thereat, form a difficult and artistically unrewarding group; here they will only be treated perfunctorily and in so far as concerns the main hoards, but, being the direct successors of type A, they will be taken before type B. The three main classes have been outlined above. In each class the typical members will be considered first, and then the marginal and uncertain ones.

Primary Runic (Pl. II)

R1 (type C). Represented in hoards VI, VII. Good relief and quite delicate style, but not that of type A. Short triangular neck on moderately arched drapery; head medium-sized; annulets quite small as though the prototype were A2, but no indication that A3 was still being issued. Inscrn. T—'æpa' or T—'apæ'—all letters with light serifs. Two varieties of the reverse (this persists): (a) complete standard, with 'fantail', (b) standard with crosses on all four sides. Weight variable, but on the average up to that of type B.

Variants

R1x. Long conical neck and small head; sharp tight style; standard small, strokes (representing XX) vertical; legend 'æpa' or 'epa', reading inwards or outwards, behind head TAT, or similar. High weight maintained.

R1y. Similar but coarser, approaching style of R3; legend on standard recognizable, with oblique strokes, to chaotic, like that on the 'porcupines': legend 'æpa', 'epa', 'lepa' (for T'epa'), &c. High weight maintained.

R1z. Looser style; large heads. Only the high weight separates these from R2.

R1x has no English provenances: it, and perhaps R1y as well, look like Low Country antecedents or collaterals of R3.

Secondary Runic (Pl. IV)

R2. Many East Anglian provenances, but rarely found in Holland. Coarse, linear technique with little relief. Head left or right, large, with a very characteristic rectangular outline on mature coins; annulets large and prominent; conical neck usually absent (except on the earliest (?) which can be distinguished from R1 variants—especially R1y—by their reverse); below head arched drapery, trellis-pattern (not the rune for 'η'), or radial strokes, like a beard. Legends: garbled variations on the 'epa' theme; 'spi' (this seems deliberate); 'wigræd' or 'wigr'd' (not 'wigud'). All letters, Runic or Latin, end in knobs, not serifs. 'Inscription' on standard recognizable, but T's of 'gamma' form. Metal poor, weight *much* reduced. There seem to be stages in the decline, notably one around 13.5 gr./0.88 gm. but even in

hoard IX there is much irregularity. Most of this group seem to be very late—after the general adoption of the ‘London’ weight, which took place about the time of hoard VIII which contains the variety R2z. The only recorded hoard with the normal form is Cambridge (IX), where it is associated with an animal type, which is found muled with it and presumably also East Anglian.

Variants

R2y. Reverse—saltire with pellets.

R2z. Reverse—cross ending in annulets (some influence from type B or from *saigas* of Bourges). The example from the Garton hoard (VIII) is a relatively heavy and early coin. Both these reverses are found, (a) with an early obverse with a conical neck, like R1y, (b) muled or combined together (Hill type 70), (c) muled with a normal R2 reverse, and R2y is also muled with the East Anglian animal type (*v.s.*). A variety of R2y is used by Beonna. Clearly both are persistent and equally East Anglian.

‘Frisian Runic’ (Pl. IV)

R3. With its distinctive reverse of a cross and four pellets and its heavy technique, this group is now widely recognized as foreign. The weight is variable but generally high—above the standard of type B. A sample of twenty-four gave a mode of 19.2 gr./1.25 gm. with a standard deviation of 0.6 gr., but several aberrants, five below 14.5 gr./0.94 gm. There may have therefore been a light issue at the very reduced standard of R2. This type began very soon after R1; it is found in the Birchington hoard (VII), and in huge numbers in all the continental hoards.

Type B (B.M.C. 27, Brooke Class 11) (Pls. III and IV)

This is perhaps the most beautiful and civilized of all the series of pre-Carolingian denarii. It comes as something of a shock that its legends do not make sense, since it has signs of systematic control that is very different from the fanciful inventiveness of some sceattas or the barbarous repetition of others. It proceeds majestically through several phases, providing a relative chronology for other series, and inspires the other sceattas, which are beyond the terms of this study. But the beginning is a mystery. If phase B X (*B.M.C.* type 26) is the earliest it is not really archetypal, as the type is essentially complete. The legends, however garbled, all reflect the name of VANIMVNDVS or AVNIMVNDVS, who signs the otherwise unrelated but equally eccentric thrymsa type II, vi. We may yet find prototypes for both, in pale gold, with legible inscriptions, made in England by the same inventive Frankish moneyer.

On B X coins, as on the others, there are minor differences, not blindly repeated, after the organic habits of barbarous coins, but deliberately varied from die to die and often shared by both obverse and reverse. Nothing like these differencing signs, which prefigure in a surprising way the privy-marks of later medieval coinage, is known on any other sceattas. Examples are: annulet before face and as initial and terminal on both dies; two annulets flanking the medial letter on both dies; two annulets in base, instead of three, on all reverse dies of one of several very similar obverses; pellets in the field

on all reverses of another of them; annulets, crosses, saltires, pellets, in field of obverse or reverse or both. The cross before the face, that distinguishes *B.M.C.* type 27a, is simply one of these: it occurs on occasion at all periods and is nothing to do with the cross-in-hand found on certain other types. The distinction is better ignored. We cannot tell whether the issues with extra annulets, for instance, were struck for the Abbot of St. Peter and St. Paul (later St. Augustine), on the analogy of the Petrine issues of York and Peterborough. But the question is not frivolous; the abbot's right to a moneyer was ancient. Concurrent subtypes and recurrent marks of difference suggest that the moneyer or moneyers of type B served several masters, and worked mainly, but perhaps not solely, at Canterbury.

The obverse axis is not always easy to determine, but the relative positions of the dies seem to conform to the four-way pattern, except in the last phase (B III). The sharp technique is distinctive and remarkably uniform, though there is a slow but progressive coarsening. The few really anomalous dies stand out clearly. Fairly consistent characteristics include: the well-drawn eye, with pupil; the ear without a dot to represent the concha; the rounded chin and the swelling beneath the hair above the forehead. All these details ally it to thrymsas of type II, vi and some of Pada, rather than to type A.

Three distinct phases of type B proper may be detected. Assuming the absolute priority of *B.M.C.* 26 (B X), this can be prefixed as a fourth. Within the phases are subtypes some of which appear to run concurrently.

Phase B X. A very elusive group. I have only examined one specimen, *B.M.C.* no. 123, but the weight and colour suggest a very base thrymsa, more convincingly than any other of type B for which a similar complexion is claimed (with a single exception). The characteristic is a base of three steps to the cross, but B X 4 (another heavy coin), if rightly assigned to this phase, has an annulet in this position. The head is very small. The fringe is like that on some later Padas, the nose and eye made with one punch, like an altered V. The inner ring is a torque with triangular ends, the bird, small and undernourished, leans forward to peck at an annulet. There are complexities of annulets and pellets on the reverse, as on B IB, and this rather meagre design might appear to derive from B IB, but since the latter revives a heavier weight it more probably also revives the type appropriate to this, with a bust, in place of a head, as on B X. I know of no hoards but one provenance—Minster (in Thanet?), and no die-identities. This rarity suggests that it is in fact a base thrymsa issue, contemporary with the late Pada and late II, vi and was swept away at the same time. But the schematized basic legend, VAN-MVA/VAN-IIVA, of the survivors looks some way off the archetype.

Phase B I. *Subtype B IA*. This is farther from BX than the next subtype, but there is little doubt that it begins earlier: the first of subtype B IB links the reverse of subtype B IA with its proper reverse, in that order, and the 'run' in the B.M. (App. G.) contains subtype B IA only. Furthermore the weight is below that of B X or any thrymsa, below those of type A 2, and of B IB, and below most of its B II successors. In other words, it was reduced too severely, though it drove type A down to its level in A3. A sample of 24, in

good condition, produced: mode: 19.0 gr./1.23 gm.; median 18.93 gr./1.227 gm., standard deviation: 0.35 gr., i.e. nearly as regular as type A2. The characteristics are: *obv.* head (not bust) with double pearl diadem, small and neat but grosser on later dies; serpent-circle on both sides, head of serpent always left, diameter of obverse circle 7 mm. increasing to 8.5 mm.; *rev.* tidy, upright bird on Latin cross (2–2.5 mm. by 3–3.5 mm.), two annulets only, more or less on line of cross-bar (for the only exception see B 1b). Basic legend: *obv.* TAVMVANV(A), *rev.* TAVHMOVANV(A), a clear echo of (T)VANIMVNDVS (*rev.*) MONE-TARIVS (*obv.*).

Eleven obverses with up to four reverses apiece. No links, but style and detail indicate the probable succession, with a short break at the introduction of subtype B 1b.

Subtype B 1b. This is a return to something nearer B X both in detail and in weight. A sample of fourteen fine specimens was hardly enough to produce a mode, but the median pointed to 19.33 gr./1.253 gm., the mean was about the same and the deviation 0.5 gr. The later ones show a remarkable parallelism in minor details to later dies of B 1a, which *may* attempt an improved weight. The earliest of subtype B 1b has the reverse of subtype B 1a; the first of B 1a after the apparent gap has a variety of the B 1b reverse. The conclusion is that B 1a was interrupted and then restarted, running concurrently with subtype B 1b. *Plus ça change . . .* we still have a florin and a half-crown!

The characteristics are: *obv.* bust, ornamented with V's or with other devices, head of variable size (small at first, like B 1a, then large and acromegalous, finally close to B 1a again); *rev.* serpent-circle, with head left or right, longer and looser bird on Greek cross (4.4–5 mm.); two annulets at first, then, after the second die had been re-cut, extra annulets or exquisite stars, finally and regularly two annulets, unevenly aligned about the upper quarters and two pellets below. Basic legend: *obv.* TAV ω MVANV(A); *rev.* VA ω VAMVANV(A). The ω is consistent.

Nine obverses, including the one that was re-cut, with up to four reverses apiece.

Subtype B 1c. This again appears to run concurrently with the two previous subtypes, but to begin a trifle later yet. Not enough examples to generalize about weight. The characteristics are as subtype A, but pearl diadem a single row and cross either Latin (2.5 by 3 mm.) or Greek (3–3.5 mm.). Legend as subtype B 1a. The bird is getting loose and ungainly, but no more so than on late examples of the other subtypes.

Six obverses.

Subtype B 1d. Transitional pieces: really late and coarse examples of subtype B 1a, but some have reverses more proper to B 1b. On all except one the serpent head is missing on one or both sides making the pearl-circle continuous. The circle is large (8–9 mm.), the head generally fat and filling the field, the bird pot-bellied, the legend as on B 1a.

Seven, rather various, obverses.

All the above show a general continuity of technique, though it undoubtedly grows less careful. The following are all more or less anomalous:

Subtype B IE. An extraordinarily fine piece; may in fact be the earliest of subtype B IA, but is of low weight. The minute precision contrasts with the boldness of normal dies. The serpent consists of 'vertebrae', not dots; crosses as terminals to legend. Certainly early, but how early?

Subtype B IF. Coarse dies, sharply executed, with spiky hair. Obverses with bust or head, but both reverses have an extra annulet before the bird, like Phase B II. These are probably late and almost qualify for subtype B ID.

Subtype B IG. Very odd engraving. Bust with almond eyes and no pearls on diadem, cross in front; bird, like a gannet, on a Greek cross, with no annulets whatever in the field. Lettering neat but 'legend' quite abnormal.¹ One obverse with two reverses and a similar reverse with a different, ill-preserved, but equally strange, obverse. Fairly early—found in hoard I.

As far as is known, fresh coins of phase B I are found with type A only, never with type C (Runic). Clearly, this phase covers a considerable development, but the transition to phase B II appears to be uninterrupted.

Phase B II. A return to uniformity, with no recognized subtypes. The recorded weights vary, but nearly half are between 19.6 and 20.2 gr./1.27 and 1.31 gm. Possibly the standard actually rose and then fell, but the dies are not easy to set in order. The workmanship is uniform but getting a little sketchy. The characteristics are: head rather thin and pushed towards the left of the field, serpent-head left, no longer beneath chin but pushed up behind ear; bird somewhat pot-bellied; almost always one extra device only (annulet, cross, saltire, &c.) in front of bird, above the two annulets on the axis of the cross-bar. The descent is from subtype B IA. The legend except on the earliest, is reduced to AVAVAV . . . , &c. Eleven obverse dies are known, but very few identities. Probably it was an intensive issue, and other dies remain to be found. Phase B II coins are found with type C (primary Runic) and Frisian imitations (R3) but no others, except worn survivors of type A.

Phase B III. This shows a catastrophic fall in style and weight. The high standard, maintained with slight variations throughout the previous phases, appears to be adjusted somewhat in the rare subtype B IIIA and to collapse completely in B IIIB. In the succeeding types, however, it recovers, at the so-called 'London' weight, but it does not seem that B IIIA represents the final attempt to rehabilitate the discredited type. A complete change of fabric suggests an interval of some years between Phase B II and the sad decline in B III. This is strongly supported by the hoard evidence, English and foreign.

Subtype B IIIA. Around 17.2 gr./1.13 gm. which is still a respectable weight, and there is an attempt at an inscription, but the technique is already abominable—three lines and a dot make the eye and nose and a few

¹ The usual legends, however garbled, are in broad uncial letters—note particularly the \mathfrak{M} —, perhaps not unrelated to the contemporary Anglian uncial MSS.: the curious lettering of BIF reminds one of certain inscriptions from the Celtic fringe, e.g. the epitaph at Santon, Isle of Man.

bristles make the bird, which may face either way. Always some device—cross, three pellets, or both—before the caricature of a face.

At least five, various, obverses.

Subtype B IIIb. Weights very unstable; some, e.g. those from hoard VIII, are up to the 'London' standard of about 16 gr./1.04 gm., like *B.M.C.* type 37; others are much lower. Like the secondary Runic, they seem to have several stages in the decline, notably one around 14 gr./0.91 gm. Schematic face as on subtype A—dots for lips, nose often huge. No device before face. Inner circle, with no trace of serpent-head, up to 10.5 mm. in diameter and usually double, leaving no room for an inscription. Bird reduced to one spiral line and three dashes. Groups of pellets, most commonly three, in one or more angles of the cross.

At least eleven obverse dies, with up to three reverses apiece.

Subtype B IIIc. As subtype B IIIb, but the bird, reduced to three strokes, resembles those on *B.M.C.* type 37. Two obverses, one incredibly bad; pellets in the annulets on reverse.

For other types, associated in hoards with this poor skeleton of type B, see the following section.

Kentish Successors of Phase B III and beginning of 'London' Standard (Pl. III)

Hoard VIII contained, besides B IIIb and R2z:

B.M.C. 37 (trident-cross between two facing heads/'flower' of four birds.

B.M.C. 32a (bust with knotted hair/beast-spiral), much more advanced-looking.

B.M.C. 3a (bust with cross before/square pattern, i.e. bi-axially symmetrical standard), well-executed and distinctly heavier (around 19 gr./1.23 gm.)

Northumbrian royal sceattas are absent; this is hardly surprising—they are essentially 'London-derived', and in any case cannot begin until after (probably some years after) 737.

Varieties typologically transitional between *B.M.C.* types 37 and 32a are also unrecorded from this or any other hoard. There are several in this category, all perhaps ephemeral rather than substantive—e.g. Hill type 72 (as *B.M.C.* type 37, but with one or two birds only); *B.M.C.* type 36 (with the same reverse, but a single obverse head, not far off B IIIb); and above all, Hill type 70 (bird- or beast-spiral on reverse, close to *B.M.C.* 32a, but head precisely as B IIIc—an absolute link is yet to be found). They must all belong to the age of hoard VIII.

Less surprisingly, there is no hoard evidence for another queer and probably alien child of type B, viz. *B.M.C.* type 29 (with facing head and forked cross); it was not found at Woodbridge.¹

¹ The details of the Woodbridge finds quoted by Dr. Sutherland from the sale-catalogue G. 1:8:1934, lot 44, do not quite agree with those from the Lawrence sale (G. 14:3: 1951, lot 193), and the latter are preferable. In any case I consider that the finds are too diverse to constitute one hoard.

The three types from hoard VIII need individual consideration: *B.M.C.* type 37 is relatively common. Its roots in type B are obvious, and distribution has been considered in that context. The trident-cross, in fact the dismembered arm of a Christogram, looks back to early Kentish thrymsas.¹ The facing busts have Visigothic precedents—of Egica and Wittiza (697–700)²—and conceivably may symbolize another dyarchy, since the Kentish throne was divided, as if by gavelkind, for some decades from 725. Furthermore, the type itself was copied on a *saiga* (RM = Rouen?), of nearly Carolingian fabric,³ towards the middle of the eighth century. *B.M.C.* 37, a backward-looking type in all but weight, evidently followed closely on B IIIb, not long after 725: other types in the same vital hoard point the way to more radical innovations.

B.M.C. type 32a is represented by one of the heaviest, and presumably earliest, of a long series with reminiscences of type B (bird or snake motifs) and, in some cases, with clear 'London connexions'. The respective shares of London and Kent in their production await a detailed analysis beyond the scope of this paper, but all the initiative will not be found to lie in London. Knotted hair, arched 'drapery', and guilloche borders may prove to be Kentish signs in a 'London-connected' series. Find-spots confirm this.⁴

B.M.C. type 3a is even heavier (some exceed 19 gr./1.23 gm.). The smooth, rounded fabric, suggesting the use of a drill, looks near to that of the signed 'Lundonia' coins (*B.M.C.* type 12), and I would tentatively suggest that *B.M.C.* 3a may be a London product, immediately preceding them and only distantly related to earlier 'standard' types.

Both *B.M.C.* 37 and *B.M.C.* 12, with its near relatives (i.e. the most closely 'London-connected'), tend to group around 16 gr./1.04 gm. and *B.M.C.* 37 seems to be the earlier. If so the 'London weight' begins in Kent, as do some elements in the designs that go with it, but not the style of die-cutting. It is not, however, absolutely certain that *B.M.C.* 3a is English at all.

Two foreign hoards, Cimiez and Hallum, also lie on this critical watershed in the sceatta series and confirm the picture established by Garton. They are, however, fractionally later. The probable dates of 737 (with a little time for coin-drift from England) and 734 (or soon after) will be discussed below, but the internal evidence is more germane: besides *B.M.C.* 3a (both hoards—it is also known from Étaples⁵), *B.M.C.* 37 (Cimiez, not fresh) and subtype B IIIb (Hallum), they contain true 'London-connected' coins. That three out of four of these are imitations only lessens the danger of too late a dating. The

¹ Compare *A.S.G.C.*, tremisses of types I, ii and IV, i, ii, iii.

² Engel and Serrure, *T.N.M.A.*, p. 45, figs. 126, 127; F. Mateu y Llopis, *Las Monedas Visigodas del Museo Arqueológico Nacional*, p. 251, nos. 82, 83, p. 281, no. 110, p. 298, no. 160, p. 313, no. 164, &c.

³ Engel and Serrure, *T.N.M.A.*, p. 176, fig. 311. A rough thing, put among the Anglo-Saxons, but certainly incorrectly. For RM denarii, see *D.G.M.M.*, nos. 3786–93. Haigh noticed this in *N.C.*² ix (1869), pp. 171 ff., and by queer reasoning reached a somewhat similar conclusion.

⁴ *B.M.C.* type 32a has the same coastwise distribution Whitby–Thames–Southampton. There is one in Canterbury Museum (no. 8083), from near Stourmouth church, Kent, found c. 1880. The derived *B.M.C.* type 38 is only recorded from Kent—*Rich.* ii, p. 227; *R.R.L.*, pl. vii, no. 4.

⁵ *C.A.* iv, p. 16.

dividing line in the sceatta coinage must be sought not far from 730, and for its most noteworthy manifestation, the LVNDONIA legend, there is some oblique evidence from documentary sources.

In an early Anglo-Saxon context a coinage that proclaims its mint is usually an exceptional one. In 731, when Bede completed his history, London, as far as he knew, was still an East Saxon city, though not without interest to the Mercian king.¹ In 732 Æthelbald was confirming particular liberties at the port of London, as enjoyed under his predecessors unnamed. Two similarly worded charters to this effect are known—to the convents of St. Andrew of Rochester and of St. Mildred of Thanet.² It would appear that Æthelbald, though in the seventeenth year of his reign, was then first in a position to issue them. In other words, he had just taken absolute lordship over London as Mercia's outlet to the world. May not 'De Lundonia', without mention of a moneyer, advertise this as surely as Egbert's similarly worded pieces? It makes no difference if the London coinage had in fact begun a year or two earlier with *B.M.C.* type 3a.

The Continental Hoard Evidence

Whereas the English hoards are small and valuable chiefly for the relative chronology of the English issues alone, several large hoards with a small English content, from Gaul and Frisia, provide a relative chronology with many more series to check from, and, in some cases, can be plausibly set in an absolute historical context. Two of these, Cimiez and Hallum, have already been quoted in connexion with the lower limit of primary sceattas.

A: Pale gold (probably 'debasement') hoards:

1. Bordeaux (1803).³ The gold content is more noticeable in the southern coins and that in spite of the facts that the dateable coins of Marseilles are already pale under Sigebert II (d. 656) and that the Frankish coins from Crondall, which are of quite good metal, are mostly northern and eastern. This suggests that the hoard should be placed after Crondall. It has an absolute *terminus post quem* in that the fairly numerous Visigothic coins end with fresh ones of Wamba (672–80): whether or not le Gentilhomme's date of 675–7 can be sustained, it can hardly tolerate a date much after 680. *Crux ansata* coins of Paris and monogram coins of Rodez are very akin to examples from Crondall, but the Rouen pieces seem closely behind thrymsas of type II, vi, and an unplaced, but probably Aquitanian, coin seems to copy the 'two emperors' reverse of II, v.⁴ Whichever copies which, they are close enough to suggest contemporaneity—that II, v and its English contemporaries flourished c. 680, and that Crondall fell in the preceding decade.

¹ In his final summing-up of the state of the country (*HE*, V, xxiv) Bede calls Ingwald bishop of London or of the East Saxons indifferently. Under Wulfhere, in the 660's (may this not be the date of the Londonia coins in Crondall?) Mercians took both the civil and ecclesiastical administration of London over (*HE*, II, xxx), but there is no implication that this continued after the re-establishment of the see under Earcenwald (of the Kentish royal house?), c. 675. For Waldhere, successor of Earcenwald, and the caldorman of Middlesex acting under the East Saxon king but consulting the interests of the Mercian, see Birch, *C.S.*, nos. 111, 115.

² *Textus Roffensis*, ed. Hearne, p. 66; Birch, *C.S.*, nos. 149, 150.

³ Le Gentilhomme in *R.N.*⁴ xxxix (1936), pp. 87–113. For Rouen coins see esp. no. 9 (Ennebert).

⁴ *Ibid.*, no. 138, pl. iii, 40 (Baudulf).

2. Dronrijp I and II (1876), Friesland,¹ contains the Rodez type,² also in Crondall and Bordeaux, and several but rather more degraded examples of a Frisian type found at Crondall.³ The date generally given (not before c. 690) is argued in isolation; I feel it is too late⁴ and would again suggest c. 680.

Though not strictly a hoard, the Sigebert/Eligius (before 656) found with an early Pada at Finglesham may be considered in this context; the grave-goods suggest the previous generation to that of sceatta-types A and BI, on grounds of general content, and Mrs. Hawkes hesitates to place this second generation later than c. 700. A date for post-Crondall coinage in the late 670's and 680's will alone satisfy all these conditions. If the hoards leave the lower limit for gold still open, it cannot be supposed that, with all this international movement of coin, England could long resist a change to silver by the Northern Franks. Not only are there dateable *saigas* by c. 700,⁵ but internal evidence tends to show that the change in Kent had taken place by the same date.

B: Predominantly silver hoards:

Four decisive French hoards are most accessible in M. Le Gentilhomme's excellent summary.⁶ He assigns them all, and rightly, to the early eighth century, but there is an appreciable lapse of time between each of them, as evinced by the progression in the coins of Rouen and Poitiers which they all contain. This is sufficient for M. Lafaurie to have suggested to me a date c. 690 for the earliest of them, but on the English evidence alone this cannot be sustained: a longer interval is absolutely demanded between the beginning of these hoards and the post-Crondall coinage, or, in French terms, the Bordeaux hoard (i.e. c. 680). On the other hand, the intervals between the hoard must not be underestimated; the two earliest may be relatively close, but the interval between these and the last one is very noticeable and confirms the impression, gained from English material, that there was a considerable gap between phases B II and B III. The English content (excluding 'porcupines', which are assumed to be foreign unless proved otherwise) of these hoards, in chronological order, is:

3. St. Pierre-des-Etieux, Cher (1882),⁷ including one pale tremissis: Primary Runic coins (R1a);⁸ type B II;⁹ also, Frisian Runic (R3).

¹ J. Dirks, *De Vrije Fries*, xvii (1887), pp. 145 ff.; J. Boeles, *Catalogue of . . . Fries Museum* (1909), p. 70; *Friesland tot de XIde Eeuw*, pp. 309-11 and 591; part of the hoard was first published in this work, tables of contents, *ibid.*, pp. 515 ff.

² *D.G.M.M.*, nos. 3887-3946, a prolific issue with little variation, most being pale gold. Compare Sutherland, *A.S.G.C.*, no. 2, pl. v, b and Boeles, *Friesland tot de XIde Eeuw*, pl. xi, 13.

³ Sutherland, *op. cit.*, no. 20, pl. v, x; Boeles, *op. cit.*, pl. xi, 11.

⁴ The argument depends on the view of Hooft v. Iddekinge (*Friesland en de Friezen in de Middeleeuwen*) that the Madelinus coins of Duurstede (of which there were two in Dronrijp II) could not begin before the occupation by Pippin of Herstal in 689. But why? See Boeles, as above. Herr P. Berghaus evidently has doubts on the same score: see *Die Kunde* (Niedersächs. Landesverein für Urgesch.), xii (1961), p. 58.

⁵ e.g. the still heavy *saiga* assigned to Chaino, Abbot of St. Denis, 696-706 (*D.G.M.M.*, no. 1486).

⁶ 'La Circulation des sceattas dans la Gaule mérovingienne' in *R.N.*⁶ ii (1938), pp. 23 ff., translated in *B.N.J.* xxiv (1944), pp. 195 ff.

⁷ Alias Creuset; in a silver vase 0.25 m. from surface of an earlier barrow. *Mémoires de la Société des Antiquaires du Centre* (Bourges), xi (1884), pp. 280 ff.; an undescribed portion has recently reappeared and M. J. Lafaurie has shown me casts.

⁸ *D.G.M.M.*, no. 5823; 'CSGM', fig. 4.

⁹ Probably two specimens, since the reported legends do not agree; see Appendix E.

4. Plassac, Gironde (1839):¹ a clipped, transitional, type B Id also Frisian Runic (R3) and its combinations.
5. Bais, Ille-et-Vilaine (1904):² types A2, B Ic (late) and B II, all worn; Frisian Runic in plenty, also the Bourges type that may inspire R2y (cross-ending in annulets).
6. Rouen (or environs):³ a small hoard, containing II vi (VANIMVND), but generally later and lighter material, close to that of Bais.
7. Cimiez, Alpes Maritimes (1851):⁴ contains other pieces, as far back as Pada, but the significant terminal date, as already mentioned, is set by B.M.C. type 37 and the two 'London-connected' coins.

Of the Frisian hoards only one has a truly English content:

8. Hallum (1866):⁵ already mentioned for its parallels with Cimiez and Driffield.

Of the other Frisian hoards, Franeker (1868),⁶ Terwispe (1863),⁷ Kloster Barte and Lutje Saaksum,⁸ are surely not, as Mr. Hill suggests, from different regions of circulation but simply rather later than Hallum—the 'porcupine' and 'Woden' coins are that much more 'degraded'. I mention this because the crises that caused their abandonment must be later than Hallum, which must be put correspondingly farther back from the final invasion of Carolingian money and men.

The context of all these hoards is the tempestuous genesis of the Carolingian empire, the mayoralty of Charles Martel, perhaps the *summa pericula rerum* of western Christendom. When he came to full power in 719 the Saracens were establishing bases in Septimania, north of the Pyrenees, from which they straightway raided deeper into Gaul, the Lombards were profiting from the Muslim successes in East and West to expand in all directions, and the Frisians were growing bolder and supporting Charles's rivals in Gaul. With an energy as astonishing as his grandson's the mayor hammered them in turn. In 732 the Saracens were finally hurled back from Poitiers. Plassac may be a waif from one of the earlier raids, c. 720. In 734 the Frisians, driven out of Gaul, were attacked by sea; this suits Hallum, the earliest and most coastal of the hoards, well enough. Cimiez was sacked in the course of the Lombard wars, in 737. I see no reason to question this long familiar dating. In any case we are too near the first tentatives towards Carolingian types for these dates to be appreciably too early. St.-Pierre-des-Etieux, then, would seem to come in the second decade of the century, and even that will seem to some surprisingly late.

It is noteworthy also that the Dutch finds become much more numerous in this phase of Primary Runic and type B II. This same second decade, or

¹ *R.N.* (1851), p. 19.

² *R.N.*⁴, xi (1907), pp. 184, 362, 481.

³ *R.N.*⁴, xxxix (1936), pp. 74 ff.

⁴ A. Morel Fatio, *Catalogue raisonné . . . de la trouvaille de Cimiez*, but the sceattas are very adequately given by Le Gentilhomme.

⁵ J. Dirks in *R.B.N.*⁵, ii (1870), pp. 81 ff., 269 ff. 'Les Anglo-Saxons et leurs petits deniers dits sceattas'—valuable but the source of some persistent errors. Boeles, op. cit., p. 591, concurs with the date 734–40; summary of hoard, *ibid.*, p. 525.

⁶ Dirks in *R.B.N.*⁵, ii, as above.

⁷ *Ibid.*

⁸ For these two hoards I rely on Mr. Hill's account in *T.L.M.A.S.* xix.

thereabouts, in spite of the troubles which drove Willibrord from his see at Utrecht, was marked by an increased intercourse with England and by that close imitation of coinage which would betoken an assimilation of culture. Frisia, hitherto a barbarian mission-field, was entering a brief period of identity with the Anglian world, before passing into the Frankish orbit.

Summary of the Numismatic Evidence

We are thus left with two securely dated phases, which seem to me incapable of adjustment by more than a decade:

- (a) The post-Crondall pale gold coinage in the 680's, if not also the 670's.
- (b) An advanced stage in Phase RI, in which Frisian imitations are already familiar and which corresponds to a comparable stage in Phase BII, in the 710's.

Between these we have to fit:

- (a) The final debasement of Pada's and other post-Crondall issues.
- (b) The sweeping away of these, good and bad.
- (c) The whole varied and experimental period of type A and all aspects of type B I, with their changes of standard and prolific output.
- (d) The beginning of the Runic coinage and of B II.

It is a tight, but not impossibly tight, programme. The interval is one of economic decline and then of remarkable recovery, and between these is a moment of devastating impoverishment. Anyone can divide the interval into aliquot fractions and allocate rough dates to these events, but fortunately the known history of the kingdom of Kent provides an exact correspondence with this purely numismatic evidence and allows a more specific dating for the stages in what could well be called the 'Kentish miracle'.

Vicissitudes of the Kingdom of Kent in the Late Seventh and Early Eighth Centuries

The events are best summarized, with a numismatic commentary, stage by stage.

673-85. Reign of the Frankish-named and francising King Hlothre, apparently in peace after a Mercian ravaging in 676.¹ This is probably the age of the various and once plentiful post-Crondall thrymsas, including the earlier issues of Pada. Hlothre was used to money; one of his acts was the redemption of a prisoner from Friesland, after a release considered miraculous.²

685. Hlothre dies of wounds received in a rebellion of his nephew, Eadric, who calls in the still pagan South Saxons. Eadric seizes the throne but is displaced next year by a West-Saxon claimant, Mul, supported by the turbulent Caedwalla of Wessex; these lay the land waste and give some of the spoils to religious houses.³ In 687 Mul is treacherously killed but is followed by at least three other adventurers from other kingdoms who

¹ In the 'Parker' text (\bar{A}) of *A.S.C.* only.

² Bede *H.E.* IV, xxii.

³ *A.S.C. sub anno*; the Peterborough text (E) records the tradition about one religious endowment.

behave in the same way.¹ These circumstances are not favourable to coinage, but perhaps the rapidly declining later efforts of Pada and type II, vi (Vanimund) should be put here.

691. Wihtred,² brother of Eadric, expels the invaders and three years later risks his hard-won popularity by an act of faith and statesmanship, which alone would place him among the best and greatest of the heptarchic kings. He agrees with the like-minded Ine, who has recently succeeded Cædwalla, to lay down arms and pay a massive wergild for Mul, and thus buys Ine's friendship for life (and both fortunately lived long), a balance of power in the south which halted any Mercian advance for forty years, and a reign of peace for his kingdom unparalleled throughout the Saxon age.

This sum, variously recorded as 'thirty thousand . . .',³ must have entailed (to use a later term) a heavy 'aid' on his exhausted subjects. Here surely is the final disappearance of the old thrymsa coinage and the occasion for the new. Both types A and B begin shortly after 694.

695. Council of Berghamstye.⁴ This is notable not only as a measure towards recovery and good government, but as the first of its kind that we hear of, the prototype of all Great Councils and Parliaments (as that of Bapchild was of church councils). In the code here enacted sceattas are first mentioned by name, since the earlier laws are but rehearsed as a preamble to Wihtred's and perhaps recast in the language of his day.⁵ Whether or not the 'mildest' king had any direct initiative in it, the conditions for the excellent new coinage are already there to testify to the swift recompense of peace.

725. *Obitus Wihtredi gloriosi regis Cantiae*.⁶

If not quite a golden age, this silver age of Kent was still something to conjure with in later centuries, and its coinage is a monument to it. The multiplicity and the lowered standards that accompany phase B III typify the relative confusion that followed.

Summing-up

The 'sceatta-problem' is simpler than generally realized: in the primary phase, which covers the first quarter of the eighth century and just, but only

¹ *Dubii uel externi reges*: Oswine (from Northumbria?), Sighere, Swaebheard and Sebba (?), from Essex. Thorne's chronicle records endowments of St. Augustine's ascribed to these.

² Bede, *H.E.* IV, xxvi, gives no accession date, but *A.S.C.* says he reigned thirty-four years. Berhtwald was appointed archbishop in 692, after a vacancy of two years. Wihtred originally had a colleague, Waebheard; or was this his rival Swaebheard, still in the field?

³ The manuscript tradition varies: the better ones give no denomination, but several eleventh-century manuscripts read 'pounds'. See Chadwick, *op. cit.*, pp. 17 ff., but D. Haigh in *A.C.* x (1876), pp. 29 ff., is still interesting. *Pace* Chadwick, I do not think that a silver shilling, be it four, five, or six sceattas, is intended at this relatively early date. Assuming that the sum was in fact 30,000 sceattas, or base thrymsas, and that even the latter could be reckoned at forty to a gold shilling, we have 1,500 shillings. This could have been an agreed sum, rather a king's wergild according to the customs of either kingdom, but note that in *Textus Roffensis*, 'by folk-law among the English' (repeated in an eleventh-century compilation in *English Historical Documents*, i, ed. Whitelock, no. 52, p. 431, as that of the 'Northleod') a king's wergild is in fact '30,000 thrymsas'.

⁴ Probably Bearsted, but possibly Burstled in Bishopsbourne. See *English Historical Documents*, no. 31, pp. 362-4.

⁵ *Ibid.*, nos. 29, 30; pp. 357-61.

⁶ Thus, the highly selective bilingual Canterbury chronicle. For an important and apparently contemporary charter of Wihtred, see *A.C.* lx (1947), pp. 1 ff.

just, extends into the seventh, the major varieties are few, easily systematized' and entirely Kentish. Whatever complications arise in the succeeding phase' the pattern of issue and the distribution of finds are like those of the first century of 'broad' pennies: Kent still predominates; East Anglia is rough in execution, if steady in output; London and Wessex issue only sporadically; Northumbria is a latecomer and Mercia proper is blank.

The 'primary sceattas' themselves are the coinage of the reign of Wihtried.

ABBREVIATIONS

- A.C. *Archaeologia Cantiana* (Kent Archaeological Soc.).
A.E.E. G. Baldwin Brown, *The Arts in Early England* (vol. iii, 1915).
AFB Collection of A. H. F. Baldwin, Esq.
AM Ashmolean Museum, Oxford.
Ant. J. *Antiquaries Journal* (Soc. of Antiquaries of London).
A.R. J. Battely, *Antiquitates Rutupianae* (1711, 1745 (Ed. used), 1774).
Arch. *Archaeologia* (Soc. of Antiquaries of London).
A.S.C. *Anglo-Saxon Chronicle* (tr. and ed. G. N. Garmonsway).
A.S.G.C. C. H. V. Sutherland, *Anglo-Saxon Gold Coinage in the Light of the Crondall Hoard* (1948).
ASSE C. H. V. Sutherland, 'Anglo-Saxon Sceattas in England: their origin, chronology and distribution', in *NC*⁶, ii (1942), pp. 42-70.
BM British Museum.
BM, B British Museum, Barnett Bequest (1935).
B.M.C. *Catalogue of English Coins in the British Museum*, Anglo-Saxon series, vol. i (1887).
B.M.Q. *British Museum Quarterly*.
BN Bibliothèque Nationale, Paris (Cabinet des Médailles).
B.N.J. *British Numismatic Journal*.
C.A. C. Roach Smith, *Collectanea Antiqua* (1848, ff.).
CEB Collection of C. E. Blunt, Esq.
C.M.L.A. C. Roach Smith, *Catalogue of the Museum of London Antiquities* . . . (1854).
Coll. Cant. G. Payne, *Collectanea Cantiana* (1893).
CRS C. Roach Smith and his collection (see *C.M.L.A.*).
C.S. W. de G. Birch, *Cartularium Saxonum* (1885-93).
CSGM P. Le Gentilhomme, 'La Circulation des sceattas dans le Gaule mérovingienne' in *RN*⁵, ii (1938), p. 23, transl. in *BNJ*, xxiv (1944), p. 195.
D.G.M.M. A. de Belfort, *Description générale des monnaies mérovingiennes* (1892-5).
EANEK Sonia E. Chadwick (Hawkes), 'Early Anglo-Saxon sites in N.E. Kent', appendix to account of Finglesham cemetery in *Medieval Archaeology*, ii (1958), p. 63.
FEJ Collection of F. Elmore Jones, Esq.
F.Syll. *Sylloge of Coins of the British Isles: Fitzwilliam Museum, Cambridge, Part I* (1958).
G+date Sale at Messrs. Glendining and Co.
Gran Former collection of Lord Grantley.
Hag Koninklijk Kabinet van Munten, Penningen, &c., The Hague.
HAP Former collection of H. A. Parsons.
H.E. Bede, *Historia Ecclesiastica gentis Anglorum* (ed. Plummer).
HM Former collection of H. Montagu.
H.Syll. *Sylloge of Coins of the British Isles: Hunterian and Coats Colls. University of Glasgow, Part I* (1961).
I.B.C.H. J. D. A. Thompson, *Inventory of British Coin Hoards, 600-1500* (1956).
J.B.A.A. *Journal of the British Archaeological Association*.

<i>J.R.S.</i>	<i>Journal of Roman Studies.</i>
JRP	Collection of Mr. and Mrs. J. R. Pritchard.
LAL	Former collection of L. A. Lawrence.
LM	London Museum.
MM	Maidstone Museum, including Kent Arch. Soc. collections.
<i>M.M.B.N.</i>	M. Prou, <i>Les Monnaies mérovingiennes, Catalogue . . . de la Bibliothèque Nationale</i> (1892).
<i>N.A.</i>	<i>Norfolk Archaeology.</i>
<i>N.C.</i>	<i>Numismatic Chronicle.</i>
NCM	Norwich Castle Museum.
PC-B	Former collection of P. W. P. Carlyon-Britton.
PdA	Former collection of the Vicomte Ponton d'Amécourt.
<i>P.S.A.</i>	<i>Proceedings of the Society of Antiquaries of London.</i>
RCL	Former collection of R. C. Lockett (after photographic record).
<i>R.B.N.</i>	<i>Revue belge de numismatique.</i>
<i>R.H.R.</i>	H. Mattingly and W. P. D. Stebbing, <i>The Richborough Hoard of Radiates, 1931</i> (Numismatic Notes and Monographs, no. 80, 1938).
<i>Rich.</i>	<i>Report on the excavation of the Roman Fort at Richborough</i> (1926 ff.).
<i>R.N.</i>	<i>Revue numismatique française.</i>
RPM	Collection of Commander R. P. Mack.
<i>R.R.L.</i>	C. Roach Smith, <i>The Antiquities of Richborough, Reculver and Lympne</i> (1850).
S+date	Sale at Messrs. Sotheby.
SER	Author's collection.
SoS	Southend-on-Sea Museum, Prittlewell Park.
<i>T.L.M.A.S.</i>	<i>Transactions of London and Middlesex Archaeological Society.</i>
<i>T.N.M.A.</i>	A. Engel and R. Serrure, <i>Traité de numismatique du moyen âge</i> (1891).
<i>V.C.H.</i>	<i>Victoria County Histories.</i>

NOTE ON PLATES

- (i) The first specimen (*a*) of each pair of dies is figured, unless otherwise described.
- (ii) The die-numbers are as in the tables, but the initial letter is omitted after the first specimen in each row where the coins follow in series.
- (iii) Sources are given, where known, in abbreviated form: for full details see the relevant appendix.

APPENDIX A

THE COINAGE OF PADA

Pale gold issues c. 680?; silver issues c. 685?

<i>Type P I</i> All pale gold (P Ib 2 not examined). <i>Obv.</i> helmeted bust r., legend always $\Sigma\tau\alpha\omicron\iota\zeta\eta\varsigma$. <i>Rev.</i> legends read clockwise from 'fantail'.			
P Ia	1. Plump head	(i) 'pada' on standard, cross-terminals annulets $\Phi\Lambda\omega\tau\tau$ - - Φ	(a) 20.3/1.32. <i>B.M.C.</i> Peada 1.
	2. Smaller head	(i) 'pada' on standard, upside down, no cross (?) $\nabla\Lambda\omega\tau\tau$ - - ∇	(a) —/—†. c/o Mrs. S. Hawkes, from Finglesham cem.
P Ib	1. Broad head	(i) Φ 'pada' $\tau\tau\Lambda\epsilon\tau$, TOT level	(a) 19.0/1.23. AM, ex HM (S. 19.11.95, lot 173).
	2. Upright head	(i) Φ 'pada' $\tau\tau\Lambda\epsilon\tau$, TOT nearly level, pellet in O	(a) 19.5/1.26. —, ex LAL (G. 14.3.51, lot 197).
	3. Smaller, upright head	(i) Φ 'pada' $\tau\tau\Lambda\epsilon\tau$, TOT level, o small	(a) 18.4/1.19.* BN, from Cimiez, CSGM, no. 1, <i>A.S.G.C.</i> , no. 83.
	4. Rounder head, legends less regular	(i) Φ 'pada' $\tau\tau\Lambda\epsilon\tau$, O of TOT in centre of standard	(a) 17.5/1.13. <i>B.M.C.</i> Peada 2.
<i>Type P II</i> P IIa 1 and 2 pale gold, the rest silver. <i>Obv.</i> laureate bust r., legend to r. only—'TIIIC (P IIa), or TINC (P IIb) <i>Rev.</i> legends read clockwise from 'fantail' which is to l. when 'pada' is read horizontally (P IIa), or from apex of cross (P IIb, on which Pada is not named).			
P IIa	1. Fine engraving, drapery in arc	(i) $\mu\iota\zeta\tau\omicron\tau\tau\alpha\tau\mu$	(a) 19.7/1.28. <i>F.Syll.</i> no. 219.
	2. Less fine, drapery in arc	(i) $\mu\iota\zeta\tau$ - - - $\Lambda\tau\mu$	(a) 17.0/1.10. BM, A 13, ex HM (S. 19.11.95, lot 172).
	3. Coarse work, drapery flatter	(i) $\mu\iota\zeta\tau\omicron\tau\tau\Lambda$ - -	(a) 18.7/1.21. —, ex RCL (G. 16.6.55, lot 275) and Gran (lot 747).
	4. Still coarser, drapery bent	(i) $\mu\iota\zeta\tau\omicron\tau\alpha\tau\mu$	(a) 19.2/1.24. RPM, ex HAP (lot 104).
	5. Coarser yet, drapery bent	(i) $\mu\iota\zeta$ - - - $\Lambda\tau\mu$	(a) 19.3/1.25. BN, from Cimiez, CSGM, no. 2.
P IIb	1. Large head, but quite fine	(i) - - $\Lambda\tau\omicron\tau$ - -	(a) 16.7/1.08.† c/o Miss V. I. Evison, from Dover cem.
	2. Similar but coarser	(i) $\mu\eta\nu\nu\eta\omicron\omicron\iota\Delta\tau\mu$	(a) 18.5/1.20 BM. <i>R.H.R.</i> , pl. xiv, no. 12 (as Merovingian).

* Coin worn or reduced.

† Coin mounted.

(cont. on p. 32)

APPENDIX A (continued)

Type P III P III 1 and 2 pale gold, the rest silver. *Obv.* diademed bust r.

P III	1. Bust with 2 annulets, OII CATI VIIAVC	(i) short saltire, NOVI 'pada' ANVSPFAVC	(a) 19-4/1-26. BM, ex Gran (G. 27.1.44, lot 595), <i>A.S.G.C.</i> , no. 82.
	2. Bust with 2 pellets, ONCA VNAVC	(i) long saltire, NOI 'pada' ANVSPFAV	(a) 19-2/1-24. <i>F.Syll.</i> , no. 220, ex RCL (lot 207) and Gran (lot 748).
	3. Squat bust, OIIAV VIIC	(i) detached annulets, II 'pada' AVIIIVSAV	(a) 19-1/1-24. BM, 4.9.14, ex CRS, from London (pr. = <i>C.M.L.A.</i> 562).
	4. 'Visigothic' bust, with 2 pellets, ON - AVNC	(i) detached annulets, O 'pada' AVIIIVCA	(a) 18-7/1-21. <i>B.M.C.</i> , Peada 3. (b) (or similar) 14-0/9-07* BM, ex CRS.
	5. As 4, but more prognathous, ONV AVNC	(i) short saltire, 'pada' AVIIIVCAV	(a) 16-2/1-05 BN (<i>ancien fonds</i>), CSGM, no. 3.
	6. 'Visigothic' bust with cross, QII - AVNC	(i) light saltire, 'pada' IIIVAVNV	(a) —/—, (cast in BM), from Sarre cem., <i>A.C.</i> vii, p. 171.
	7. As 6, but narrower bust, OIIo AVNC	(i) detached annulets, 'pada' AVCAVIA	(a) 17-9/1-16. RPM, from Sarre cem. <i>A.C.</i> vii, p. 171. (b) 19-8/1-28. AM, ex Evans, and PdA (? French find). (c) 18-9/1-22†. c/o Miss V. I. Evison, from Dover cem. (d) (or similar) 11-6/0-75* BN, from Cimiez, CSGM, no. 4.

* Coin worn or reduced.

† Coin mounted.

APPENDIX B

THE COINAGE OF VANIMUND (AUNIMUND?)

Type II, vi (in sequence to Sutherland), or 55 (Hill, in sequence to *B.M.C.*). Has every appearance of another ultimate Kentish thrymsa coinage, parallel with Pada's, in spite of the number of coins (? a French hoard) from PdA and ultimately from Siward de Beaulieu.

<i>Type VA</i> <i>Rev.</i> long cross with pellets and CA, all pale gold.	
VA	1. (<i>rev.</i>) +VAII IMVNDVS MOIE (<i>obv.</i>) O TIANIVS 19-1/1-24, BN, <i>M.M.B.N.</i> , no. 2730, <i>D.G.M.M.</i> , no. 3301. 2. (<i>rev.</i>) - - AII MVNDVS MOIE (<i>obv.</i>) O TIANIVS 20-1/1-30, —, PdA, <i>D.G.M.M.</i> , no. 3300. 3. (<i>rev.</i>) +VAII IMVNDVS MONE (<i>obv.</i>) TIIIVIVS 20-4/1-32, BN, <i>M.M.B.N.</i> , no. 2731.
□ <i>Type VB</i> <i>Rev.</i> short expanding or paty cross; generally described as silver, but VBI, 2, 3, at least, have a visible gold content.	
VB	1. (<i>rev.</i>) +TMVNDVVOE (<i>obv.</i>) - - - IVS 18-6/1-215, AM. ex RCL (lot 273), ex PdA, <i>D.G.M.M.</i> , no. 3304. 2. (<i>rev.</i>) +TMVNDVVOE - - (<i>obv.</i>) O TIANIVS —/—, —, PdA and Beaulieu, <i>D.G.M.M.</i> , no. 3302. 3. (<i>rev.</i>) +TMVNDVVOE (<i>obv.</i>) TIA - S 18-2/1-18, BM, from Colchester, <i>B.M.Q.</i> xx, no. 1 (1955), p. 14, pl. vi, 6. 4. (<i>rev.</i>) (same die) (<i>obv.</i>) O TAV IIS 18-2/1-18, BN, from Rouen, <i>Rev. Num.</i> i (1937), p. 81, pl. iv, 22. 5. (<i>rev.</i>) +TM - NVMVCE (<i>obv.</i>) T - - OIVS coarser work 19-3/1-25, —, RCL (lot 274), ex PdA, <i>D.G.M.M.</i> , no. 3306. 6. (<i>rev.</i>) +TMVNDVVOE (<i>obv.</i>) O TAV IVS „ —/—, —, PdA and Robert, <i>D.G.M.M.</i> , no. 3307. 7. (<i>rev.</i>) - - - NVMVCE (<i>obv.</i>) - - - VS 13-4/0-87, * <i>H.Syll.</i> no. 77. <i>N.C.</i> xiii (1953), vii, 1. annulet before face 8. (<i>rev.</i>) +TMVNDVVOE (<i>obv.</i>) O S IVS 18-5/1-20, —, PdA and Beaulieu, <i>D.G.M.M.</i> , no. 3303. 9. (<i>rev.</i>) MIIIVMIVS (<i>obv.</i>) O TN - AVS [<i>sic</i>] 16-2/1-05, —, PdA and Beaulieu, <i>D.G.M.M.</i> , no. 3305.

* Coin worn or reduced.

APPENDIX C

TYPE A (*B.M.C.* 2a) *c.* 695–705?

List of *obverse* dies only (with references, where possible, to published corpora of public collections); order within subtypes not determined. General descriptions in text.

* Coin worn or reduced.

- A 1. 1 (a) 19-0/1-23, AFB.
- A 2. 1 (a) 19-5/1-26, *B.M.C.* 17; (b) 18-3/1-18, MM, Hd. II, 1. 2 (a) 19-9/1-29, AM; (b) 19-5/1-26, AM (Barnett dup.). 3 (a) 19-6/1-27, *H.Syll.* 3; (b) 19-5/1-26, AFB. 4 (linked annulets): (a) 20-0/1-30, *B.M.C.* 15; (b) 19-2/1-24, *B.M.C.* 16; (c) 19-8/1-28, *H.Syll.* 2; (d) 20-0/1-30, *F.Syll.* 223; (e) 19-5/1-26, BM—B, 216; (f) 19-6/1-27, AM (Barnett dup.). (g) 19-25/1-24, RPM. 5 (linked annulets): (a) 19-5/1-26, Hd. I, 1. 6 (a) 19-8/1-28, *F.Syll.* 228. 7 (a) 19-5/1-26, *H.Syll.* 7 (b) 16-9/11-00*, *F.Syll.* 227. 8 (a) 20-2/1-31, *H.Syll.* 6; (b) 20-0/1-30, Hd. I, 2. 9 (a) 18-3/1-18, AM. 10 (a) 19-5/1-26, *F.Syll.* 222. 11 (a) 19-9/1-29, *F.Syll.* 224. 12 (a) 17-7/1-14*, *F.Syll.* 225. 13 (a) —/—, ex RCL, lot 209, 1. 14 (a) 19-9/1-29, *B.M.C.* 19; (b) 19-8/1-28, *B.M.C.* 20; (c) 19-0/1-23, BM—B, 217. 15 (a) 20-2/1-31, *B.M.C.* 18. 16 (a) 19-5/1-26, *B.M.C.* 13. 17 (a) 19-5/1-26, *B.M.C.* 14. 18 (a) 20-0/1-30, *B.M.C.* 11. 19 (a) 19-5/1-26 *F.Syll.* 229. 20 (a) 19-8/1-28, *H.Syll.* 1. 21 (pendant pearls, looks transitional): (a) 19-4/1-26, *B.M.C.* 10; (b) 19-0/1-23, BMC 22; (c) 19-0/1-23, BM—B 218; (d) 19-3/1-25, *H.Syll.* 4; (e) 15-6/1-01*, *F.Syll.* 230. 22 (a) 19-0/1-23, ex Grantley, lot 702.
- A 3. 1 (transitional?): (a) 19-5/1-26, *F.Syll.* 221; (b) 19-0/1-23, RPM. 2 (a) 17-0/1-10, *B.M.C.* 21; (b) 17-6/1-14, AM. 3 (a) 19-8/1-28, BM, ex Brookes; (b) 17-6/1-14, AFB. 4 (a) 17-2/1-11, AFB. 5 (a) 19-5/1-26, *B.M.C.* 12; (b) 18-3/1-18, AFB; (c) 16-9/1-10*, *F.Syll.* 226. 6 (a) 19-0/1-23, Hd. I, 3. 7 (a) 17-6/1-14, MM, Hd. II, 2. 8 (a) 18-8/1-22, MM, Hd. II, 3. 9 (a) 16-8/1-09, MM, Hd. II, 4. 10 (a) 18-4/1-19, MM, Hd. II, 5. 11 (a) 17-4/1-13, MM, Hd. II, 6. 12 (a) 19-0/1-235, AM; (b) 18-9/1-23, MM, Hd. II, 7. 13 (a) 5-9/038*, Hag. 14 (a) 18-1/1-17, SoS, Hd. VI, 1. 15 (somewhat barbarous): (a) 14-8/0-96, AM, from Compton, Staffs. 16 (akin to 9, 12) (a) 19-3/1-25, BN, CSGM no. 5, from Cimiez. 17 (a) 17-9/1-16, ON, CSGM no. 6, worn, from Bais.
- A 4. 1 (barbarous, but style unlike R1; rev. has crosses on all four sides of standard, like R1 (b): (a) 18-9/1-22, AFB. 2 (very barbarous): (a) 18-9/1-22, BM, from Richborough, *Rich.* II, p. 227.

APPENDIX D

RUNIC COINS

Pending a study of dies, it must suffice to give, as typical examples, a selection only, from known finds and from the published corpora of public collections. The BM collection is ill-balanced, and the much more representative AM collection has not yet been syllogized.

R1 (type C): Hoard VI, no. 4, 18-2/1-18 (a); *ibid.* 5, 16-97/1-098 (a); *ibid.* 6, (*c.* 705–15?) 18-46/1-196 (a); *ibid.* 7, 18-53/1-202 (b); *ibid.* 8, 18-37/1-19 (b); Hoard VII, 2, 15-9/1-03 (b); *B.M.C.*, no. 43, 19-7/1-28 (a); *ibid.* 45,

15·9/1·03 (b); *ibid.* 46, 8·6/1·21 (b); BM, B 293, 20·2/1·31 (b); *H.Syll.*, no. 9, 17·0/1·10 (b).

R1x: *B.M.C.* no. 36, 18·2/1·18; *ibid.* 37, 18·3/1·19; *ibid.* 38, 15·3/1·00; *ibid.* 39, 17·7/1·15; *ibid.* 40, 18·8/1·22; *H. Syll.*, 10, 18·4/1·19; *ibid.* 11, 17·3/1·12.

R1y: *B.M.C.*, no. 44, 18·0/1·17; *ibid.* 48, 17·8/1·16, legible reverse; *ibid.* 49, 18·6/1·21; all illustrated in *B.M.C.*

R1z: *H.Syll.*, no. 12, 16·2/1·05; *F.Syll.* 233, 19·6/1·27; *ibid.* 232, 18·0/1·17—a marginal example, approaching R1y—this classification is not exhaustive.

R2: Early, near R1z: *B.M.C.*, no. 33, 13·5/0·87; *ibid.* 34, 15·2/0·98; (Early coins, *F. Syll.* 234, 11·0/0·71 (diagonally symmetrical standard).

inc. R2z, Normal, 'epa', &c.: Hoard IX, no. 4, 13·5/0·87; *ibid.* 5, 13·25/0·85; *ibid.* 6, 15·7/1·02; *H.Syll.* 16, 15·1/0·98; *B.M.C.* no. 25, 10·2/0·66; *ibid.* 27, 13·5/0·87; *ibid.* 29, 10·5/0·68; *ibid.* 30, 11·5/0·75; *ibid.* 32, 9·7/0·63; *ibid.* 35, 10·1/0·65.

later) Normal, 'wigræd', &c.: Hoard IX, no. 8, 14·5/0·94; *ibid.* 9 12·5/0·81; *H.Syll.*, no. 17, 13·7/0·89; *F.Syll.*, 235, 12·9/0·84; *ibid.* 236, 13·2/0·86; from Thetford, 11·5/0·74.

Normal, 'spi'; Hoard IX, 7, 17·0/1·10; from Caister, no. 138, 13·0/0·84.

'Bearded head': (e.g. AFB, 11·5/0·75).

R2y: *H.Syll.*, No. 13, 13·5/0·875.

R2z: *H.Syll.*, no. 15, 16·5/1·07; Hoard VIII, no. 6, 16·5/1·07. BM (A. 7), 14·4/0·936. The Burgh Castle example (*N.A.* v, p. 233) was normal, but with standard superimposed on cross ending in annulets. From the same site, R2z, var. b, 15·7/1·02, BM ex RCL.

R3: Hoard VII, no. 3, 18·0/1·17; from Caister, no. 680; *F.Syll.* no. 231, (c. 705–15, from Reculver, 19·3/1·25; from Kingston Down Cemetery, 17·1/1·11; *B.M.C.*, no. 28, 12·1/0·78; BM B219, 13·4/0·87; BN, CSGM, nos. 7–23, from Cimiez, Plassac, and, above all, Bais, more than two-thirds weigh between 18·1/1·17 and 20·4/1·32 (mean: 19·2/1·24), but one is as low as 12·7/0·82; 66 examples, 'good to barbarous' at The Hague, as against only three of other Runic types.

Dimensions in millimetres; legends read

<i>Obv. die</i>	<i>h-head, or h-bust (design on bust in brackets)</i>	<i>Symbols in field</i>	<i>Diam. of circle</i>	<i>Jaw of serpent</i>	<i>Legend</i>	<i>Rev. die</i>
PHASE B X (B.M.C. 26) (? before 695)						
B X, 1	b. (annulets)	..	6½	..	○VΛNTM VΛ	i
B X, 2	b. (⟩⟩⟩)	Annulet r.	7	..	○VΛN -- M VΛI ○	i
B X, 3	b.	+r., An. l.	8½	..	†ΛVII ○V ---	i
[? might be B II]						
B X, 4	h.	2 pellets r.	9	..	- - - - -	i
PHASE B I (c. 695–705)						
<i>Subtype B IA:</i>						
B IA, 1	h. round		7½	l.	Υ ○ T Λ V M V Λ H V Λ I T ○	i ii iii iv
B IA, 2	h. smaller		7	l. hooked	○ T Λ V I M V Λ H V Λ ○	i ii
B IA, 3	h. similar		7½	l. hooked	○ T Λ V M V Λ H V Λ I ○	iii i ii
B IA, 4	h. similar		7½	l. hooked	○ T Λ V M V Λ H V Λ I T ○	i ii iii
B IA, 5	h. larger		8½	l.	--- H ○ M ○ V Λ H ---	i ii
B IA, 6	h. similar		8½	l.	○ T Λ V H ○ + ○ H V Λ T ○ ○	i ii
B IA, 7	h. similar		8	l.	-- Λ V M V Λ H ----	i
[? short interval for introduction of B Ib]						
B IA, 8	h. as B IA, 5		8½	l.	○ T ---- Λ H V Λ T ○ ○	i
B IA, 9	h. broader		9	l. dotted	○ T Λ ---- Λ V ○ ○	i
[cf. B Ib 9, B Ic, 2]						
B IA, 10	h. similar, large eye		9	l.	○ T Λ V † M V Λ H --- ○	i ii
[near B Ib]						
B IA, 11	h.		8½	l.	----- I I V ○	i

* Coin worn or reduced.

E

(B.M.C. 26-27)

clockwise from serpent's jaw or from bust

Size of cross	'Clock' positions of annulets	Ditto of symbols in field	Jaw of serpent	Legend	
3×3, st.	2, 10	pellets 3, 9	..	+EVLMOIIVΛ+	(a) 20-0/1-30, B.M.C. 123.
4×3, st.	2, 9½	..	..	○VΛIIVΛ∞IIVΛ○	(a) —/—, RCL, lot 237/1.
4×3½, steps	2, 10	pel. 3, 4, 7½, 9½	..	+ - - - - VΛ+	(a) —/—, RCL, lot 237/2
4×3, pel.	3, 6, 9	..	r.?	- - - - -	(a) 19-3/1-25*, BN, CSGM, no. 64, (Cimiez).
2½×4	3, 9	..	l.	- TΛVHMVΛHVΛ - -	(a) 18-7/1-21, B.M.C. 132.
3×4	3, 9	..	l.	○TΛVHMVΛHVΛ○	(a) 19-0/1-23, B.M.C. 129.
3×4	3, 9	..	l.	○TΛVHMVΛH - - ○	(a) —/—, RCL, lot 237/4.
3×3½	3, 9	..	l.	○ - - VHMVΛHVΛ○	(a) 19-0/1-23, MM, Hd. II, 9.
2½×3½	3, 9	..	l.	○TΛVHMVΛNVΛ○	(a) 19-8/1-28, BM, B, 251; (b) 19-5/1-26, H.Syll. 67.
2½×3	3, 9	..	l.	○TΛVHMVΛNVΛI○	(a) 17-2/1-11, B.M.C. 127; (b) 18-8/1-22, H.Syll. 69.
2½×3	3, 9	..	l.	○TΛVHMVΛHVΛI○	(a) 19-0/1-23, BM, B, 252.
2×3	3, 9	..	l.	○ΛVHMVΛHVΛI○	(a) 16-8/1-09, MM, Hd. II, 10.
2½×3½	3, 9	..	l.	○TΛVHMVΛHT○	(a) 18-8/1-22, H.Syll. 70; (b) 17-8/1-15, JRP.
2½×4	3, 9	8 dots in 2nd q.	l.	○TΛVHMVΛHVΛT○	(a) 19-0/1-23, AM, Barnett dup.
3×4	3, 9	7 dots in 2nd q.	l.	○TΛVHMVΛHT○	(a) 18-8/1-22, B.M.C. 131.
2×3½	3, 9	6 dots in 3 quarters	l.	○TΛVHMVΛHVΛ○	(a) 18-0/1-17, B.M.C. 134; (b) 19-5/1-26, FEJ, 30; (c) RCL, lot 238/2. (d) —/—, P. V. Hill.†
2½×3½	3, 9	..	l.	○+ΛV - - - - IΛ+○	(a) 19-0/1-23, B.M.C. 130.
2½×3½	3, 9	..	l.	○TΛVHMVΛIIVΛ○	(a) 18-5/1-20, MM, Hd. II, 12.
2½×3½	3, 9	..	l.	○TΛVHMVΛIIVΛT○	(a) 19-0/1-23, B.M.C. 128.
3×4	3, 9	..	l.	TΛVHMVΛIIVΛT○	(a) 18-5/1-20, CEB.
3½×4	3, 8½	..	..	TΛVHMVΛIIVΛ - -	(a) 18-3/1-18, AM.
4×3½	3½, 9	+, 2½, pel. 5, 7	l.	○TΛV - - - - - ○	(a) 19-4/1-25, H.Syll. 68.
3½×3½	2½, 8½	..	..	- - - - MVLΛIΛ○	(a) 18-2/1-18 MM, Hd. II, 13.
3×3	3, 9	..	l.	○ΛVΛIΛMVLΛIV○	(a) 19-4/1-25, AFB, 1.
3×3	3, 9	..	l.	- - - - MVLH - -	(a) —/— LM, no. 1067, ex Layton
3½×4	3, 9	7 dots in 2nd q.	r.	VΛΛVΛV//	(a) 17-0/1-10*, AM.

† B.N.J. xxvi (1951), pl. iii, 27, and xxvii (1953), pl. iii, 22.

<i>Obv. die</i>	<i>h-head, or b-bust (design on bust in brackets)</i>	<i>Symbols in field</i>	<i>Diam. of circle</i>	<i>Jaw of serpent</i>	<i>Legend</i>	<i>Rev. die</i>
<i>Subtype B Ib</i>						
B Ib, 1	b. small (ΛVΛ)		7	..	ΤΩΛΜVHVL◊	i
B Ib, 2a	b. long chin (ΛVΛ)	Annulet r.	9	..	ΤΛVΩΛΜVHVL —	i
B Ib, 2b	[same die, retouched]					ii
B Ib, 3	b. long chin, large jewel (→)	cross, 2 × 4½	9	..	ΙΙΛΥΩΛΜVΛΙΤΙΙ	i
						ii
						iii
[cf. B Ia, 7, 8]						
B Ib, 4	b. (ΛVΛ)	..	8½	..	ΙΙΛVΩ - ΜΥΛΙΙΙ	i
						ii
B Ib, 5	b. (*)	..	8	..	----- NVΛT	i
B Ib, 6	b. smaller (ΛVΛ)	..	7	..	ΙVΩΛΜVΛΙΙVΛΙ	i
B Ib, 7	b. large eye (ΛVΛ)	..	8	..	ΙΙΩΙΜΙΙVΛΩT	i
B Ib, 8	b. as B Ib, 6, but larger	..	8	..	--- ΜVΛΙΙVΛ	i
[cf. B Ia, 10, B Ic, 2]						
B Ib, 9	b. large eye (*)	..	8	..	ΙΩΛΜVΛTVΛV	i
						ii
						iii
						iv
<i>Subtype B Ic</i>						
[cf. B Ib, 8]						
B Ic, 1	h. single diadem	..	7½	l.	◊TΛVΜVΛHVΙ◊◊	i
[cf. B Ia, 10, B Ib, 9]						
B Ic, 2	h. ditto, large eye		9	l.	◊T ---- ΛHVΙ◊◊	i

* Coin worn or reduced.

E (cont.)

Size of cross	'Clock' positions of annulets	Ditto of symbols in field	Jaw of serpent	Legend	
3×3	3, 9	..	l.	○VΛΛVΛMVAI○○	(a) 19·3/1·25, <i>H.Syll.</i> 65; (b) 16·2/1·05, * <i>H.Syll.</i> 66; (c) 19·5/1·26, AM.
[Same die as B1B, 1-i]				" "	(a) 19·5/1·26, RPM; (b) —/—, RCL, lot 238/3.
4½×4½	1½, 3, 4½, 7½, 9, 10	(3 & 9 smaller)	r.	○○VΛΛVΛMVAIIIVΛ○	(a) 19·1/1·24, <i>B.M.C.</i> 135; (b) 19·3/1·25, <i>H.Syll.</i> 64; (c) 17·3/1·12, * <i>F.Syll.</i> 250; (d) 19·6/1·27, PC-B, lot 165/b; (e) 19·2/1·25, MM, Hd. II, 14; (f) —/—, RCL, lot 238/5.
4½×5	2½, 9½	pel. 4½, 7½	l.	VΛΛVΛMVAIIIVΛ○○○	(a) 19·8/1·28, <i>H.Syll.</i> 74; (b) 18·8/1·22, <i>H.Syll.</i> 75; (c) —/—, RCL.
4½×4½	2½, 10	pel. 4½, 7½	l.	VΛΛVΛMVAIIHVΛ○○○	(a) 17·3/1·12, * MM, Hd. II, 16; (b) 18·4/1·19, * FEJ, 31; (c) —/—, RPM.
4½×4½	2, 10	pel. 4, 8	l.	○VΛΛVΛMVAIIHVΛ○○○	(a) 19·8/1·28, BM, B, 249.
4½×5	None; stars 2, 9½	pel. 4½, 7½	l.	○TIIΛΛM - ΛΛIIT -	(a) 19·6/1·27, BM, B, 250; (b) 19·6/1·27, <i>H.Syll.</i> 63.
3½×4½	2, 4, 7½, 9½	..	l.	○VIAΛMIIIVAI - -	(a) 16·4/1·06, * BM, B, 255; (b) 15·7/1·02, * MM (Farningham).
4×4½	3, 4½, 7½, 9	..	l.	○VΛ - - VΛHΛV○○	(a) 19·0/1·23, Hd. I, 4.
3½×4	2, 9	pel. 4½, 7½	l.	--- MVVIVT○○	(a) 20·0/1·30, Hd. I, 5.
3×4	2½, 10	pel. 4½, 7½	l.	○VΛΛVΛMVAIIIV○	(a) 18·1/1·17, <i>B.M.C.</i> 137.
3½×4½	2½, 8½	pel. 4½, 7	l.	○VΛ - - MVAIIIV○	(a) 19·3/1·25, <i>B.M.C.</i> 126 (not as <i>B.M.C.</i> description).
3½×4	2½, 9	pel. 4, 7½	l.	○VΛΛVΛMVAIV!○	(a) 17·5/1·13, Caister, 562; (b) 19·0/1·26, RCL (Hd. III, 3).
4×4	2½, 9½	pel. 4½, 7½	l.	○IVΛΛVMV - - ○○	(a) 16·5/1·07, * <i>B.M.C.</i> 136.
4×4	2½, 8½	pel. 4, 7½	l.	○VΛΛVΛMVAIVΛV○	(a) 16·2/1·06, * BM, B, 253.
3×4	2½, 8½	pel. 4½, 7	l.	○VΛ - - MVAIIIV○	(a) 19·4/1·26, AM.
2½×3	3, 9	..	l.	○ΛVHΛMVAIIHVΛ○○	(a) 19·5/1·26, Hd. I, 6.
3½×3½	3, 9	..	l.	○ΛVHΛMVA - HVΛ○○	(a) 17·0/1·10, BM, B, 254 (Hd. III, 4).

<i>Obv. die</i>	<i>h-head, or b-bust (design on bust in brackets)</i>	<i>Symbols in field</i>	<i>Diam. of circle</i>	<i>Jaw of serpent</i>	<i>Legend</i>	<i>Rev. die</i>
<i>Subtype B Ic (cont.)</i>						
B Ic, 3	h. similar				○ ----- ○○	ii
B Ic, 4	h. ditto, upright	..	7	l.	---- II VΛHVΛ○○	i
B Ic, 5	h. similar	..	8	l.	○ TΛV - VΛHVΛ○○	i ii
[near B II]						
B Ic, 6	h. hooked nose	2 pellets ?	8	l.	---- M VΛ --	i
<i>Subtype B Id</i>						
B Id, 1	h. dot for eye		8	r.	○ T ---- Λ VHT	i
B Id, 2	h. ditto, large ear		9	r.	○ ---- Λ !!○○	i
B Id, 3	h. similar, broad		8	r.	--- H V ! M ----	i
B Id, 4	h. ditto, very fat		9	l.	- - - - -	i
B Id, 5	h. very similar		9	none	○ T ! V --- M VΛHVΛ○ !	i
B Id, 6	h. smaller, with neck		8	none	○○ + T I V ○ V M V I V Λ ○ ○	i
[near B II]						
B Id, 7	h. coarse, larger eye		8	none	○ - ~ V I I ! ! M V Λ ○ ○ ○	i
<i>Subtype B Ie</i>						
B Ie, 1	h. very fine		8	two?	○ --- † M V Λ H --	i
<i>Subtype B If</i>						
B If, 1	h. dot for eye		7½	r.	○○ I I Λ Λ H Λ V - Λ ~ I ○	i
B If, 2	b. dot for eye (+)		7½	..	T V Λ M V Λ H Λ	i
<i>Subtype B Ig</i>						
B Ig, 1	b. with striations	cross, 1½ × 3	7½	..	○ I I I N O M I H O	i ii
B Ig, 2	h. round	pellet r.?	7	r.?	I I Λ Λ I I ----	i
<i>PHASE B II (c. 705-15)</i>						
B II, 1	h.		7½	l.	Λ N V M ----	i
[copy of B Ib2?]						
B II, 2	h. long chin	cross, 1½ × 2½	7½	l.	-- Λ V M V Λ ---	i

* Coin worn or reduced.

E (cont.)

<i>Size of cross</i>	<i>'Clock' positions of annulets</i>	<i>Ditto of symbols in field</i>	<i>Jaw of serpent</i>	<i>Legend</i>	
3×3	2½, 9	..	l.	- - - - -	(a) 15·1/0·98,* BM (Ex B & M Dept. 1937).
3×3½	3, 9	..	l.	○TWHVMVΛ!!!○○	(a) 18·0/1·17 —, after CRS (Hd. III, 5).
2½×3½	3, 8½	..	l.	○TΛVϙ --- V○○	(a) 19·5/1·26, AM, has a pale gold tinge.
3×3½	3, 9	..	l.	○ΛVϙMVAHVIO○	(a) 18·5/1·20, B.M.C. 133.
3×3½	3, 9	..	l.	○TΛ ----- ΛV○○	(a) 16·4/1·06, F.Syll. 249.
4×4	3, 9	..	l.	-- VHΛMV ---	(a) 19·3/1·25, BN, CSGM, no. 67 (Bais).
3×4	3, 9	6 and 5 dots in 3 quarters	l.	---- MTVΛ!! --	(a) —/—, ex de Man, A.E.E. iii, pl. iv, 11 (Domburg).
3×4	2½, 9	3 pel., 2½	none	- - - - -	(a) 19·9/1·29, BN, CSGM, no. 69 (Plassac).
3×4	3, 9	..	none	○ - VΛHṀ ----	(a) 19·3/1·25, SER.
3½×4½	2, 10	pel. 4, 8	l.	○N ----- ○	(a) 15·6/1·01,* AM.
3½×3½	2, 10	pel. 4½, 8½	none	○TΛ --- MVAHVIO	(a) —/—, R.R.L. pl. vii, 6 (Reculver).
4½×4½	3, 4, 8, 9	..	l.	○Λϙ○VIIIMAVIIVIO○	(a) 17·7/1·15, H.Syll. 71; (b) —/—, RCL, lot 238/1.
3½×3½	2, 4, 8, 9½	..	r.	○○---- ΛMNVΛ○	(a) 19·3/1·25 H.Syll. 72.
2½×3½	3, 9	..	l.	+ΛVHṀVHΛ+○○○	(a) 16·0/1·04, MM Hd. II, 17.
3½×4½	2, 3, 9	(Annulet, 2)	r.	○○VΛVϙṀ -- ΛV○	(a) —/—, RCL, lot 237/5.
3½×3½	2, 3, 9	(Annulet, 2)	l.	○VΛϙMVAIΛ○○	(a) 18·8/1·22, PC-B, lot 164/c., from Hd. IV (Ozengell).
3½×3½	none	..	l.	○ --- ○IMṀ○○	(a) 19·0/1·23, B.M.C. 124.
3×3	none	..	l.	-- mṀIOṀΛ -	(a) 18·0/1·17, Hd. I, 7.
3×3	none	..	l.	○ --- IIOIIMṀO	(a) 16·5/1·07,* AM.
2½×4½	3, 9	4 pellets, 2	r.	---- Ṁ ----	(a) 19·9/1·29, BN, CSGM, no. 68 (Bais).
3×3½	2, 3, 9	(Annulet, 2)	l.	○ --- ΛMV -- ○○	(a) 9·5/0·61,* Hag. D.G.M.M., No. 6215.

<i>Obv. die</i>	<i>h-head, or b-bust</i>	<i>Symbols in field</i>	<i>Diam. of circle</i>	<i>Jaw of serpent</i>	<i>Legend</i>	<i>Rev. die</i>
PHASE B II (<i>cont.</i>)						
B II, 3	h.		8	l.	ΛVΛV, &c.	i
B II, 4	h.		7½	l.	ΛVΛV, &c.	i
B II, 5	h.		7	l.	ΛVΛV, &c.	i
B II, 6	h.		7	l.	ΛVΛV, &c.	i
B II, 7	h.		9	l.	- - - -	i
B II, 8	h.		9½	l.	- - - -	i
B II, 9	h.		9	l.	ΛVΛV, &c.	i
B II, 10	h.		9	l.	ΛVΛV, &c.	ii
B II, 11	h.		8	l.	ΛVΛV, &c.	i

PHASE B III (*c.* 725-30; B IIIA might be barbarous coins of a little earlier)*Subtype B IIIA*

B IIIA, 1	h. fine strokes	3 pellets	9½	?	none ? (double circle)	i
B IIIA, 2	h. „	cross, 3 pel.	9½	r.	- ||| - ||| -	i
B IIIA, 3	h. coarse strokes	cross, 3½ × 3½	9½	?	||| (&c. ?)	i
B IIIA, 4	h. „	3 pellets	10	r.	(illegible)	i
B IIIA, 5	h. „	1 pellet	10	l.	„	i

Subtype B IIIB:

B IIIB, 1	h.		10½	none	none	i
B IIIB, 2	h.		10	„	„	i
B IIIB, 3	h.		10	„	„	i ii
B IIIB, 4	h.		9½	„	„	i
B IIIB, 5	h. large nose		9½	„	„	i
B IIIB, 6	h. „		10	„	„	i

* Coin worn or reduced.

E (cont.)

Size of cross	'Clock' positions of annulets	Ditto of symbols in field	Jaw of serpent	Legend	
2 × 3½	3, 9	...	l.	ΛVΛV, &c.	(a) 18·5/1·20, SoS, Hd. VI, 2. (b) 15·5/1·00, * SoS, Hd. VI, 3; (c) 13·9/0·90, * Hag.
2 × 3	3, 9	...	l.	ΛVΛV, &c.	(a) 16·7/1·08, * AM Hd. VII; 1.
2 × 3	3, 9	+, 2	l.	ΛVΛV, &c.	(a) 20·0/1·30, Hag. <i>D.G.M.M.</i> , no. 6216.
2½ × 3½	3, 9	+, 2	l.	ΛVΛV, &c.	(a) 17·9/1·16, RPM.
2 × 4	3, 9	+, 2½	l.	----	(a) 11·7/0·76, * Hag.
2½ × 4	4, 9	+, 2½	l.	ΛVΛV, &c.	(a) 17·4/1·13, <i>B.M.C.</i> 139.
2½ × 4	3½, 9	+, 2½	l.	llVW ---	(a) 19·7/1·28 BM, B, 256.
3 × 3½	3, 9	×, 2	l.	ΛVΛV, &c.	(a) 17·4/1·13, <i>B.M.C.</i> 138.
2½ × 3	3, 9	×, 2	l.	ΛVΛV, &c.	(a) 18·4/1·19, <i>F.Syll.</i> 251 (Reculver); (b) or similar, (St. P. de Etieux). §
2½ × 3½	3, 9	Λ, 2	l.	ΛVΛV, &c.	(a) 19·6/1·27, AFB; (b) —/—, (St. P. des Etieux), <i>D.G.M.M.</i> , no. 6209.
3 × 3	3, 9	λ, 2	l.	ΛVΛV, &c.	(a) 16·8/1·09, * AM.
4 × 5	3, 9	...	?	-- | -- o | --	(a) 17·0/1·10, AFB.
4 × 4½	3, 9	2 pel., 1½; 1 pel., 4½	l.	+Π --- MΛHH	(a) 17·3/1·12, <i>H.Syll.</i> 76.
3 × 5	3, 9	pel. 2, 4½, 7½	none	-- ||l|l| - [Bird faces L.]	(a) 17·2/1·11, <i>B.M.C.</i> , 125; (b) 143/0·93, * <i>F.Syll.</i> 253.
5 × 6	3, 9	pel. 2½ (?)	r.	(Illegible)	(a) 16·4/1·06*, <i>H.Syll.</i> 73.
3½ × 4	3, 9	...	r.	ΠVΛV	(a) ex HM, lots 164-5.
3 × 6	3, 8½	4 pel. (2nd q.), 3 pel. (3rd & 4th q.)	No serpent	No legend, spiral-winged bird	(a) 15·3/0·99, AM.
3 × 6	3, 9 (pel. in an.)	"	"	"	(a) 10·2/0·66, <i>B.M.C.</i> 141.
3 × 6	3, 9	"	"	"	(a) 9·7/0·63, RPM.
3 × 6	3, 9	"	"	"	(a) 14·2/0·92, BN, CSGM, no. 65 (Cimiez).
2 × 6	3, 9	"	"	"	(a) 13·2/0·86, BM, B, 257 (Southampton)
3 × 5	3, 9	"	"	"	(a) —/—, RCL, lot 239/3.
3 × 5	3, 8½	"	"	"	(a) 17·0/1·10, Grantham, Hd. VIII, 1.
3 × 6	3, 9	"	"	"	(a) 17·5/1·13, Grantham, Hd. VIII, 2.

§ *Mémoires de la Société des Antiquaires du Centre*, xi (1884), Bourges, no. 26 (p. 286).

<i>Obv. die</i>	<i>h-head, or b-bust</i>	<i>Symbols in field</i>	<i>Diam. of circle</i>	<i>Jaw of serpent</i>	<i>Legend</i>	<i>Rev. die</i>
<i>Subtype B IIIb (cont.)</i>						
B IIIb, 7	h. large nose		9½	none	none	i
B IIIb, 8	h.		10	„	„	i
B IIIb, 9	h.		9½	„	„	ii i
B IIIb, 10	h.		9½	„	„	i
B IIIb, 11	h.		9	„	„	i
B IIIb, 12	h.		9½	„	„	i
<i>Subtype B IIIc</i>						
B IIIc, 1	h. v. sharp nose	3 pellets	9	„	„	i
B IIIc, 2	h. rather better		9½	„	„	i

(Almost a die link with BM, B 259 (15-0/0-97) and *H.Syll.*)

* Coin worn or reduced.

E (cont.)

Size of cross	*Clock* positions of annulets	Ditto of symbols in field	Jaw of serpent	Legend	
3 × 6	3, 9	4 pel. (2nd q.), 3 pel. (3rd & 4th q.)	No serpent	No legend, spiral-winged bird	(a) 15-0/0-97, <i>F.Syll.</i> 252 (Re-culver).
3 × 6	4, 9	4 pel (2nd q. only)	"	" "	(a) —/—, RCL, lot 238/2, 3-6/0-23, * Hag.
3 × 6	3, 9	"	"	" "	(b) 13-9/0-90 (Utrecht). §§
2½ × 4½	3, 9 (pel. in an.)	2 pel. (2nd q. only)	"	" "	(a) 12-2/0-79, FEJ, 32.
2 × 3	3, 9	No pel.	"	" "	(a) 14-2/0-92, <i>B.C.M.</i> 140.
3½ × 5	3, 9	No pel.	"	" "	(a) —/—, RCL, lot 238/1.
3 × 7	3, 9	3 pel. in 3rd & 4th q., cross in 2nd, pel. in 1. annulet	"	" "	(a) 13-6/0-88, BM, B, 258.
3½ × 6	3, 9	3 pel. in 3rd & 4th q. only, pel. in annulets	"	" Bird as type 37	(a) 20-0/1-3 (!), BN, CSGM no. 66 (Cimiez).
4 × 4½	3, 9	"	"	" "	(a) 12-7/0-81, AM.
100 (11-4/0-74) Hill, type 60, with <i>Rev.</i> —bird-spiral.)					

§§ *Opgravingen op het Domplein te Utrecht*, pt. iii (1936), fig. 72, p. 115.

APPENDIX F

CHRONOLOGICAL INVENTORY OF HOARDS

NOTE: weights in this section are given in grains only, where they have only been weighed to the nearest half-grain; where both standards are given they have been weighed to the nearest centigramme. Top of rev. on type A determined by votive inscription.

I. BROADSTAIRS (Valetta House), Nat. grid: 61/395/671.

(Thompson, *I.B.C.H.*, no. 58 = no. 59; Sutherland, *ASSE*, p. 54—both references; S. Hawkes, *EANEK*, no. 29 = no. 28; c.f. Baldwin Brown, *A.E.E.* iii, pp. 84, 108, 132.)

Found 1911, by Broadstairs and St. Peter's Archaeological Soc., in a Saxon cemetery overlying a Bronze Age funerary circle. The grave (L) contained a bronze buckle, small knife and 'keys' (girdle-hangers (?), if so the subject was hardly male, as reported); coins near left arm. See H. Hurd, *Some Notes on Recent Archaeological Discoveries at Broadstairs* (1913), pp. 18-27, figs. 11, 12.

8 coins (7 examined); 3 type A, 5 type B; mean weight 19.3 gr. In family ownership since discovery. Weights by kindness of Mrs. H. M. Raven.

Type A: (1) A2, 5 (19.0) →. (2) A2, 8 (b) (20.0) ↑. (3) A3, 6 (19.0) ↓.

Type B: (4) B Ib, 5/i (a) (19.0) →. (5) B Ib, 6/i (a) (20.0) ↓. (6) B Ic, 1/i (a) (19.5) →.

(7) B Ig, 1/ii (a) (18.0) →. (8) Another, subtype unknown.

Condition, fresh; buried soon after introduction of A3 and B Ic.

II. MILTON REGIS, Nat. grid: 51/907/648 (?).

(Thompson, *I.B.C.H.*, no. 269; Sutherland, *ASSE*, p. 54.)

Found 1916, by R. Mills, a brickfield worker, near Milton Old Court Hall. The nearest brickfield is 300 yds. east of the Hall. This information and the grid-reference of the suggested find-spot is from Mr. L. R. A. Grove. There was certainly a cemetery, perhaps extensive, in the vicinity: G. Payne, in *Coll. Cant.*, p. 124, reported grave-goods, found 1889, including a crystal ball, which he believed came from about the same position, though the exact spot was withheld; in 1959 Mr. D. A. Ponton excavated a cremation and disturbed inhumations in the immediate surroundings of the Court Hall. Coins found with three gold filigree pendants, with cruciform design (BM, 1921, 10-20, 1; 1926, 4-10, 1-8); see *Ant. J.* vi (1926), p. 446, from which the description of the unexamined coins comes. The pendants suggest a female interment.

20 coins (14 examined); 8 type A, 12 type B; mean weight 17.9 gr. The 14 coins bought for MM, 1958, from Mills's grand-nephew. Weights from BM.

Type A: (1) A2, 1 (b) (18.29/1.185) ←, complete die-identity with *B.M.C.* 17, A2, 1 (a). (2) A3, 7 (17.62/1.142) →. (3) A3, 8 (18.76/1.216) ↑. (4) A3, 9 (16.82/1.09) ↓. (5) A3, 10 (18.41/1.193) ↓. (6) A3, 11 (17.43/1.129) →. (7) A3, 12 (b) (18.92/1.226) ↑, obv. identity only with A3, 12 (a). (8) A3, 5 (or similar).

Type B: (9) B Ia, 1/iv (a) (18.99/1.231) ←. (10) B Ia, 3/i (a) (16.77/1.087) →. (11) B Ia, 4 (or similar). (12) B Ia, 5/ii (a)—possibly B Ia, 6 (18.52/1.20) ↑. (13) B Ia, 9/i (a) (18.18/1.178) →. (14) B Ib, 2b/i (e) (19.21/1.245) ↑. (15) apparently as (14). (16) B Ib, 3/ii (a) (17.27/1.119) ↑. (17) B Ie, 1/i (a) (16.04/1.037) ←. 18, 19, 20 'as *B.M.C.* 126'; ought to be B Ib, but the inadequate description in *B.M.C.* need imply only *some* BI subtype.

Condition, good; some wear, corrosion and clipping, particularly on the earlier coins. The latest BI issues are absent, including the large-eyed dies found in Hoard III. Noticeably later than Hoard I.

III. BARHAM (Breach Down), Nat. grid: 61/207/490.

(Thompson, *I.B.C.H.*, no. 34 = no. 54; Sutherland, *ASSE*, p. 54—under both locations; cf. Baldwin Brown, *A.E.E.* iii, pp. 108–9; also Akerman, *Arch.* xxx, p. 56.)

Found 1841 (*not* 1843), by J. P. Bartlett, in excavating a cemetery of small barrows. The grave contained small 'brass' ornaments, a ring, decayed wood and (?) leather; coins on right side of body. See *C.A.* i, p. 7; all coins shown on pl. vi. This was *not* the same burial as that containing the well-known cross-headed pin (*A.E.E.* iii, pl. x, 5), of which Bartlett gives a complete and different inventory in *J.B.A.A.* i, p. 317; in the former case the subject was less certainly female.

5 coins; 2 type A, 3 type B; mean weight 17.6 gr. Coins dispersed: one in BM, one formerly Lockett coll., rest untraced. Weights from CRS (no. 4, in BM, has been checked).

Type A: (1) A3, 10, or similar (17.0). (2) A3, 5 or 13 (?) (17.0).

Type B: (3) B 1b, 9/i (b) (19.0) ↑. (4) B 1c, 2/i (a) (17.0) ↑. (5) B 1c, 3/i (a) (18.0). (Nos. on *C.A.* i, pl. vi: 14 = 1, 15 = 2, 11 = 3, 12 = 5, 13 = 4.)

Condition, fresh; though the coins are a trifle more advanced than the latest of Hoard II, the date of burial may be much the same.

IV. RAMSGATE (Ozengell), Nat. grid: 61/361/654.

(Sutherland, *ASSE*, p. 55; S. Hawkes, *EANEK*, no. 24.)

Found 1845–7, when the Deal–Ramsgate railway was made, in a cemetery 500 yds. south-east of Ozengell Grange. Apparently found by navvies, so the hoard may have been larger; not from one of the thirteen graves excavated by W. H. Rolfe. See *C.A.* iii, p. 15 and pl. v, 16 for the coins (part of a general account of the cemetery, for which also see *J.B.A.A.* i, p. 242, ii, p. 338, iii, p. 246).

3 coins recorded, all type B, only one illustrated; this reappears in the Carlyon-Britton sale (S. 17:11:1913, lot 164/c), whether the others were in this or the next lot cannot now be determined.

Type B: (1) B 1f, 2/i (a) (18.8). (2) and (3) Type B, subtype unknown.

Condition of known coin, fresh; records inadequate, but probably late in phase BI.

V. SANDY (Beds.), Nat. grid: 42/177/487 (?).

(Sutherland, *ASSE*, p. 51.)

Found before 1898, perhaps 1850, during extension of G.N. Railway. Near and particularly, just west of the station, grave-goods from an important cemetery of long duration, including cremation-urns, came to light both in Battely's time (late seventeenth cent.) and 1850. See *V.C.H. Beds.* i, p. 184; *C.A.* ii, p. 34; *P.S.A.* ii, p. 109. This is at least a possible site for the coins.

4 (?) coins; 2 type B (S. 14:3:1898, lots 172, 174); 2 type A (or just possibly R1) in immediate sequence in sale-catalogue, though not specifically described as from Sandy. Hoard might be early (cf. Hoard I).

Type B: (1) and (2) B 1a or B 1c or possibly B 1d (no symbols in field).

Type A: (3) and (4), not guaranteed.

VI. SOUTHEND (Thorpe Bay), Nat. grid: 51/922/855.

(Thompson, *I.B.C.H.*, no. 336; Sutherland, *ASSE*, p. 52.)

Found 1929, in Thorpe Hall brickfield, with or near a skeleton. Evidence of other burials, or other grave-goods, lacking. Accounts vary: one report gave 20 coins (cf. Hoard II), another 81 (? a misprint), but the preservation of eight (cf. Hoards I, VIII) suggests that the hoard may be complete. See W. Pollitt, *Southchurch and its Past* (Southend Museum Handbook no. 11).

20 (?) coins (8 examined); 1 type A; 2 type B; 5 type C (R1); mean weight of undamaged coins, 18.2 gr. (1.179 gm.). 8 coins in SoS (Pritwell Park Museum). Weights from M.O.W. laboratory.

Type A: (1) A3, 14 (pendant pearls, T's on rev. canted) (18.1/1.173) ↑.

Type B: (2) B II, 3/i (a) (18.53/1.201) ↓. (3) B II, 3/i (b) (15.4/0.998 scraped) →.

Type C (R1a, standard right way up): (4) 2 pendant pearls, annulet below chin, T 'æpa' (18.21/1.180) ←. (5) 2 pearls, T 'æpa' (16.97/1.098) ↑.

(R1a, standard inverted): (6) 2 pearls, annulet below chin (?), T 'æpa' (18.46/1.196) ←.

(R1b, crosses on all sides of standard). (7) 3 pearls, annulet below chin, T 'æpa' (18.53/1.202) →. (8) 2 pearls, standard small (5 mm.), T 'æpa' (18.37/1.190) →.

Note, only on no. 7 can the reading 'æpa' be taken as certain; on all the others any 'a' might possibly be 'æ' and vice-versa.

Mr. Forbes' numbers: 1 = 9489, 2 = 9487, 3 = 9488, 4 = 9490, 5 = 9494, 6 = 9493, 7 = 9491, 8 = 9492.

Condition fresh but rather corroded, except no. 1 somewhat worn and no. 3 scraped. Features, e.g. nose of no. 1 suggest it is in fact late and approaching the technique of R1, which is very similar on all the Runic coins in this hoard, in spite of the various reverses. All have the same blunt chin, but the neck is longer on R1b. R1 is in fact a scarce and probably brief issue; the extra annulet found on both varieties is very exceptional. The identical early B II coins fix the context narrowly. Buried soon after introduction of B II.

VII. BIRCHINGTON, Nat. grid: 61/302/690 (?).

(Thompson, *I.B.C.H.*, no. 43; Sutherland, *ASSE*, p. 54; S. Hawkes, *EANEK*, no. 33.)

Found before 1848 (railway not built until 1863), acquired from finder by W. H. Rolfe. There was a cemetery at Minnis Bay, but nothing to associate the coins with it or with a grave; the exact site is unknown, but analogies would suggest a burial. See *CA*, i, p. 64, pl. xxiii, *A.C.* ix, p. 164. A coin in MM, from Birchington, combining the rev. of R3 with a degenerate standard (cf. *H. Syll*, nos. 50–54), seems too late to be a stray from the hoard.

5 coins, including an Epillus (Mack, *The Coinage of Ancient Britain*, no. 307—might be the same coin, but reported weights different—CRS gives 18 gr.); there is no reason to doubt that a coin of this weight could have passed as a sceatta—indeed the PI on Mack no. 309 could have influenced type A; 1 type B; 1 type C (R1); 2 R3. Saxon coins now in AM, ex Evans.

Type B: (1) B II, 4/i (a) (16.7/1.08), clipped, ←.

Type C: (R1b): (2) close to Hoard VI, no. 7, but 2 pearls and no extra annulet (15.9/1.03) →.

Frisian Runic (R3): (3) a degenerate piece, though no worse than one from Plas-sac; runes a meaningless ligature (17.0/1.10). (4) even worse, and plated (8.5/0.55).

Condition of no. 2, fresh, others worse. Insufficient for dating, but evidently R3 followed closely on R1 and soon 'went to the bad'.

VIII. GARTON ON THE WOLDS (Yorks.), Nat. grid: 44/987/577.

Found 1959, by Mr. T. G. Manby of the Tolson Memorial Museum, Huddersfield, during excavation of a cemetery, directed by Messrs. Grantham. Beneath the body, in remains of purse (?)—no other grave-goods. All information by courtesy of Mr. Graham Teasdill, who is publishing a note in *Transactions of the Yorkshire Numismatic Soc.*, 1960. A report on the excavation is expected in *Journal of the Yorkshire Archaeological Soc.*, 1961.

8 coins, including 2 of the latest of type B; weights, from Mr. Teasdill, too diverse for the mean to have any significance. Most reverses bi-axially symmetrical so die-position cannot be given, but it seems to be right-angled in every case. Coins in Grantham coll., Driffield.

Type B: (1) B IIIb, 5/i (a) (17.0). (2) B IIIb, 6/i (a) (17.5), both with the most usual arrangement of pellets, but weights high for this sub-type.

BMC type 37: (3) (17.0), (4) (16.5); the dies of this type are extremely uniform, but the weights are rather high (the mode seems to be just above 16 gr.).

BMC type 32 a: (5) traces of beard on obv., monster completely serpentine. Full identity with *H.Syll.* 98. (19.0), again, high for issue (mode seems to be about 17.5).

All the above are most probably Kentish.

Runic type: (6) R2z, 'epa' read outwards, knobs, not serifs, and technique, not far off that of the Kentish issues above; triangular neck and curved, dotted drapery repeated above and below head. Cf. *H.Syll.* 15, but less 'degraded'. Clearly early in phase R2 and close to R1z. (16.5, same weight as *H.Syll.* 15); presumably East Anglian.

BMC type 3a: (7) rev.; pellet in central annulet and four saltires, c.f. *B.M.C.*, no. 50 (19.5). (8) as previous but three saltires and group of three pellets (19.0). The rev. of this elusive type has its nearest parallel on definitely Frisian 'porcupines' and it may be foreign (found e.g. at Cimiez and Etaples); one thing is quite clear from the continental hoards: type 3a is not a distant prototype of the porcupines, but contemporary. No. 7 is reported to have a visible trace of gold.

Condition, fresh; this hoard is discussed in the text; it is of the highest importance for comparative chronology. The chief conclusions are: (a) the later Kentish issues, e.g. no. 5, begin earlier than expected; (b) the fully developed R2 issues, as in Hoard IX, are yet to come. Buried about the conclusion of Phase B III (c. 730?).

IX. CAMBRIDGE (or vicinity).

(Thompson, *I.B.C.H.*, no. 68; Sutherland, *ASSE*, p. 52.)

This hoard, 9 coins of which are thoroughly described and illustrated by J. Evans in *NC*³, xiv, pp. 18 ff., pl. ii, is summarized here for comparison. It appears to have been larger than 9 (see *F.Syll.*). Some coins in AM, ex Evans.

Runic types: R2, typical 'mature' coins with 'quadrilateral head':

Evans No. 4 (13.5) 'ep', no. 5 (13.25) 'ep', no. 6 (15.75) 'ep', no. 7 (17.0), 'spi', no. 8 (14.5) 'wigræd', no. 9 (12.5) 'wigr'd'.

F.Syll. 235, (12.9) 'wigr'd', *F.Syll.* 236, (13.2), 'wigr'd' as previous but head l. *F.Syll.* 234, (11.0) earlier type with obv. diagonally symmetrical and triangular neck (? from hoard), 'epa', and others?

East Anglian animal types: Evans no. 1 (13-75) smooth as *B.M.C.* type 44. No. 2 (15-25) rougher work. No. 3 (16-75), triquetra above bird.

As Evans noticed, the animal type is a close prototype of some of Eadbert's of Northumbria. This confirms the very late date of 'mature' R2 coins (? 740's). Evans quotes another East Anglian find-spot for this type (somewhere in Suffolk), E. J. Shepherd sale (1885), no. 9 (bird and triquetra).

APPENDIX G

NOTE: Weights in this section are given in grains only, for purposes of internal comparison. Both standards are given in Appendixes C and E.

'Runs' of coins, the appearance of which suggests a common source; possibly all three are part of one single find.

A. BM, undated, i.e. acquired before 1838 (see *B.N.J.* xxviii, p. 37). The one coin with a provenance, *B.M.C.* 10 (Thanet), is not certainly part of the 'run', but Mrs. J. S. Martin considers that one of the elusive Thanet hoards is a likely source. In this context two false trails should be 'scouted': (i) the plate of sceattas in Withy and Ryall's *Twelve Plates of English Silver Coins* . . . (1756) does not show these types but *later* sceattas, purporting to have been found in and near Thanet; (ii) the 'Saxon' coins said to have been found at Telegraph Hill, Minster in Thanet, and quoted by Mrs. S. Hawkes in *EANEK*, no. 23, were in fact, according to the Ordnance Survey index of Archaeological sites, a seventeenth-century find of *Roman* coins.

12 to 14 coins, 6 to 8 type A, 6 type B—all subtype B 1A, except *B.M.C.* 124. This is important in establishing the subsequent introduction of B 1b and the early date of the anomalous B 1g.

Type A: *B.M.C.*, nos. 17, A2, 1 (19-5), probable; 16, A2, 4 (19-2); 19, A2, 14 (19-9); 20, A2, 14 (19-8); 13, A2, 16 (19-5); 22, A2, 21 (19-0); 10, A2, 21 (19-4), not certain; 12, A3, 5 (19-6), not certain, but colour close to *B.M.C.* 19.

Type B: *B.M.C.* Nos. 132, B 1A, 1/i (a) (18-7); 127, B 1A, 2/ii (a) (17-2); 131, B 1A, 4/ii (a) (18-8); 130, B 1A, 5/i (a) (19-0); 128, B 1A, 6/i (a) (19-0); 124, B 1G, 1/i (a) (19-0).

B. BM and AM, ex-Barnett bequest (1935), 'duplicates' to AM. Unfortunately the records of the pedigree of the Barnett material were destroyed in the 'Blitz'.

11 or (?) 12 coins; this number and the uncanny resemblance to the next and absolutely inviolate 'run' suggests that both are either picked samples of the same eighteenth-century hoard or grave-deposits of twelve, buried at very much the same time.

Type A: BM, B, nos. 216, A2, 2 (19-5), and duplicate in AM (19-6); 217, A2, 14 (19-0); 218, A2, 21 (19-0); AM, A2, 2 (19-5).

Type B: BM, B, 251, B 1A, 2/i (a) (19-8); 252, B 1A, 2/iii (a) (19-0); AM, B 1A, 4/i (a) (19-0); BM, B, 249, B 1b, 3/iii (a) (19-8); 250, B 1b, 4/i (a) (19-6); 253, B 1b, 9/iii (a), very doubtful, well below weight.

C. Hunterian Museum, engraved in sequence by Taylor Combe (who had no particular reason to associate types A and B, unless they formed one parcel), except that a Vanimund coin (VB 7) comes between them (Ruding, pl. 2, no. 26); the others are nos. 22 to 36). Acquired before 1783; the accounts of purchases in the introduction to the Greek *Sylloge* of the Hunterian Museum show

'Saxon' from Bartlet in 1782, and from White in 1778 and 1779, the latter 'from Hamb.' Miss A. Robertson has kindly confirmed this reading.

12 coins, 4 type A, 8 type B, but the Vanimund (*H.Syll.*, no. 77) and one or two worn type B might just possibly be associated.

Type A: *H.Syll.*, nos. 3, A2, 3 (19.6); 2, A2, 4 (19.8); 1, A2, 18 (19.8); 4, A2, 21 (19.3).

Type B: *H.Syll.*, nos. 67, B 1A, 2/i (b) (19.5); 69 B 1A, 2/ii (b) (18.8) 70, B 1A, 3/ii (a) (18.8); 65, B 1B, 1/i (a) (19.5); 64, B 1B, 2b/ii (b) (19.3); 74, B 1B, 3/i (a) (19.8); 75, same die, (b) (18.8); 63, B 1B, 4/i (b) (19.6).

APPENDIX H

SUMMARY OF FINDS OF SINGLES AND PAIRS OF THE RELEVANT TYPES

NOTE: (i) Some may be parts of small grave-hoards. In any case the relevance for local circulation, of single finds and small grave-hoards is similar, in contrast to that of large and miscellaneous trade-hoards.

(ii) For details of individual coins, where not repeated, see the foregoing appendixes.

(iii) For details of BM coins not in *B.M.C.*, see P. V. Hill in *N.C.*⁶, xiii, p. 92 ff.

A. *Pada*. Kent: FINGLESHAM cemetery, grave 7—P 1A, 2/i; SARRE cemetery, grave 226—P III, 6/i, P III, 7/ia (*A.C.* vii, p. 171); DOVER cemetery, grave 110—P IIb, 1/i, P III, 7/ic.

LONDON: P III, 3/i (probably *C.M.L.A.*, no. 562), and P III, 4/ib (?).

B. *Vanimund*. COLCHESTER: VB, 3 (*B.M.Q.* xx, p. 14).

C. *Type A*. Kent: BARHAM (village, not Breach Down) (*Arch.* xxx, p. 56); RECULVER—2 (*A.R.*, pl. vi); RICHBOROUGH—A2 (*R.R.L.*, p. 157), A4, 2 (*Rich.* ii, p. 227).

LONDON: A2 (*C.M.L.A.* as Ruding, pl. ii, 22).

COMPTON, Staffs.: A3, 15.

D. *Primary Runic*. R1, LONDON (*C.A.* ii, pl. xlv, 9); WOODBRIDGE, good early R1y, as *B.M.C.*, no. 48, ex LAL (lot 193, c); RECULVER, R1z, *F.Syll.* 233, *A.R.* pl. vi).

Secondary Runic. East Anglia: BURGH CASTLE—early, near R2z, but clear votive legend, probably from area of early Christian church, found when motte was demolished, c. 1850 (*N.A.* v, p. 233; also R2zb (Hill, type 70, e) BM, ex RCL. CAISTOR by Norwich—2 (*S.* 1:6:09). CAISTER by Yarmouth—2, both fairly early: no. 138 (from near the Anglo-Saxon hut-site) and another (NCM, noted in ASSE). IPSWICH—(CEB, ex Rashleigh, lot 23). THETFORD, from interior of early church site, under the 'Red Castle' (publication by Gp. Capt. Knocker forthcoming)—mature 'Wigraed'. WOODBRIDGE—fairly early, as *B.M.C.*, no. 33, ex LAL (lot 193, b).

Bedfordshire: DUNSTABLE—mature, found 1851 (*S.* 1:6:09). HOUGHTON REGIS, early, possibly R1z, formerly loaned to Letchworth Museum. LANGFORD—early, head 1. with radial strokes (*S.* 14:3:98).

LONDON (*C.A.* ii, pl. xlv, 3).

WHITBY—early, obv. identical with *B.M.C.*, 33, BM.

Frisian Runic. R3. KINGSTON DOWN cemetery, Kent, grave 15; RECULVER, *F.Syll.*, no. 231, *AR*, pl. vii; DUNSTABLE, *N.C.* xv (1852) p. 95: CAISTER by Yarmouth, No. 680, from western sidewalk of Roman harbour, close to Saxon cemetery.

E. *Type B*. Kent: FARNINGHAM—MM, ex Ashenden, found 1870's—B IB, 4/iib; RECULVER—B ID, 5/ia (*R.R.L.*, pl. vii, 6), B II, 10/ia, B IIIA, 3/ib, B IIIB, 7/ia (all *A.R.* pl. vii and *F.Syll.*); MINSTER in Thanet, BX (ASSE, but coin not in BM, note only).

Wessex/Sussex: SELSEY—subtype? (ASSE); SOUTHAMPTON, B IIIB, 3/iiia, BM, B; ILCHESTER (*S.* 19:7:17).

East Anglia: CAISTER by Yarmouth, No. 562, from modern sewer-trench—B IB, 9/ia; WOODBRIDGE—ex LAL (lot 193a) B I (?).

(The Brentford find (ASSE) is not authenticated—see B IA, 10/ia, LM no. 1087, ex Layton and Brentford Mus. but not marked as local.)

F. *Related later types, as in Hoard VIII.*

B.M.C. type 3a: PYECOMBE, Sussex, BM; WAKERING, Essex, SoS (*JRS*, xvi (1926), p. 230); DUNSTABLE (*S.* 17:11:13, lot 154); WHITBY, BM.

B.M.C. type 32a: STOURMOUTH, Kent—Canterbury Mus. no. 8083, ex Newington and Arnold, found c. 1880; RECULVER—*F.Syll.*, nos. 254, 255 (*A.R.*, pl. vii); WHITBY, BM; THAMES—*B.M.C.*, no. 152.

B.M.C. type 37: DALE HILL, Sussex, Brighton Museum; WOODBRIDGE, ex LAL (lot 193d); CAISTER by Yarmouth, No. 614, in or over top-filling of a grave.

APPENDIX I

SPECTROGRAPHIC ANALYSIS OF HOARD VIII AND THE PADA COINS FROM DOVER

A SPECTROGRAPHIC analysis of the coins has very kindly been carried out by the Assay Office, Goldsmiths' Hall. In sending the following results Mr. J. S. Forbes, the Deputy Warden of the Assay Office, makes the proviso that the results must be treated with reserve and they are in no way comparable with those obtained from other coins which are published elsewhere in this volume.

Nevertheless, since no other analyses of sceattas have been made and such coins are not often likely to be available for a complete test, I consider the results should be published. It is thought that the gold content would be unlikely to be effected by the cleaning.

The following results were obtained on scrapings taken from the edges of the coins. It should be stressed that the coins were originally corroded and had been subjected to a prior electrolytic cleaning treatment before they were received. The cleaning treatment may have altered the composition of the coins and the results must therefore be treated with reserve.

HOARD VIII (Southend)

<i>Coin</i> no.	Au %	Bi %	Pb %	Sb %	Sn %	Zn %	Cu %*
9487	0.90	0.03	0.66	0.007	0.22	0.03	4.6
9488	1.3	0.06	0.68	0.011	0.38	N.D.	4.7
9489	1.1	0.04	0.64	0.006	0.06	N.D.	3.0
9490	0.84	0.03	0.31	0.005	0.03	0.01	1.8
9491	1.2	0.04	0.33	0.004	0.04	0.02	1.4
9492	0.66	0.03	0.78	0.006	0.01	0.01	2.4
9493	0.48	0.01	0.25	0.005	0.14	0.05	3.0
9494	0.79	0.02	0.30	0.007	0.05	0.02	2.2

* Approximate figures only. N.D. = 'Not Detected'.

COINS FROM DOVER (in the form of pendants)

<i>Coin</i>	Au %	Bi %	Pb %	Sb %	Sn %	Zn %	Cu %
P IIb, 1 (= 467)	0.78	0.33	0.59	0.04	0.17	<0.01	12*
P III, 7c (= 468)	0.30	0.03	0.88	0.06	9*	0.08	24*

* Approximate figures only. < Signifies 'less than'.

TWO DIE-LINKS RELATIVE TO THE ANGLO-SAXON MINT AT NORTHAMPTON

By MISS V. J. BUTLER AND R. H. M. DOLLEY

OF recent years the theory has been advanced, and very largely accepted, that there were Anglo-Saxon mints both at Northampton and at Southampton, the former coming into existence about the middle of the tenth century and continuing right into the Norman period, and the latter being set up early in the tenth century and closing early in the reign of Cnut.¹ Both mints, of course, normally employ the same mint-signature, HAM(TVNE), and the division of the coins between them is not always an easy matter. On the whole, though, the principles propounded in the note of six years ago have stood the test of time, and in this paper there are published two die-links which may be thought to supply not unwelcome corroboration of their essential validity. These new links are perhaps all the more satisfying inasmuch as the die-links already published relate only to Southampton.

The first of these die-links (Fig. 1) was brought to our notice by Mr. F. Elmore Jones, and we are most grateful to him for permission to publish it here. The 'Hamtune' end of it is a coin of the moneyer Æthelnoth who had been given to Northampton for reasons of prosopography and style. The coin illustrated here which is in his own cabinet is a die-duplicate of Hild. 1238, and belongs to the Long Cross issue of Æthelræd II which we believe to have been current from Michaelmas 997 until Michaelmas 1003. The obverse die is also used at London by the moneyer Æthelwerd, and again the coin illustrated is one in his own cabinet; it is also a die-duplicate of Hild. 2171. Æthelnoth struck at Northampton in the Long Cross type only, whereas Æthelwerd at London struck over the whole period *c.* 991–*c.* 1016. It would seem, therefore, that the obverse die in question most probably was issued in the first place to Æthelnoth, was returned to London when that moneyer gave up striking, and was taken over by Æthelwerd (a relative?) whose output of coin in this particular type may fairly be described as prodigious. One should perhaps add that the possibility of a London/Southampton die-link in this type seems remote inasmuch as there is some reason to think that Winchester was producing all the dies needed for mints in that area.

The second of the die-links (Fig. 2) was discovered by Miss Butler when working on the Systematic Collection at Stockholm. The 'Hamtune' end of it is a coin (Hild. 1289) also of the Long Cross issue of Æthelræd II by the moneyer Wulfric who likewise had been attributed to Northampton on grounds of style and prosopography. The obverse die is one that is also used

¹ The principal expositions of the new theory are R. H. M. Dolley, 'The Mints of Northampton, Southampton and Harwich', *Num. Circ.* 1955, p. 159; R. H. M. Dolley and G. van der Meer, 'A Group of Anglo-Saxon Pence at Sudeley Castle', *Num. Chron.* 1958, pp. 123–34; R. H. M. Dolley, 'Nieznany dotychczas pens mennicy w Southampton znaleziony w skarbie polskim', *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi, Seria Archaeologiczna*, Nr 5, Łódź, 1960, pp. 79–88 (with English version); R. H. M. Dolley, 'The Relevance of Obverse Die-Links to some Problems of the Later Anglo-Saxon Coinage', *Commentationes de nummis saeculorum IX–XI in Suecia repertis*, Stockholm, 1961, pp. 155–72.



FIG. 1.



FIG. 2.

(Hild. 1218) by a moneyer Sidwine who employs the mint-signature GRE. Bror Emil Hildebrand identified the mint as Greenwich, but as long ago as 1909 this attribution was corrected by P. W. P. Carlyon-Britton who observed that in the immediately preceding Crux issue Sidwine had struck at Cambridge.¹ Here again the sequence of events is reasonably clear inasmuch as at Northampton Wulfric is known from coins of the Long Cross, Helmet, and Last Small Cross issues. The die would have been issued in the first place to Sidwine at Cambridge, and almost at once have been returned—presumably when Sidwine gave up striking—and been reissued to Wulfric who strikes the Long Cross coins at Northampton on a very considerable scale. It is perhaps worth noting, incidentally, that Hildebrand records the obverse legend of the Cambridge coin as ‘e, ir.100’ and that of the Northampton coin as ‘a, ir.100’. The difference lies in the use at one point of E as opposed to Æ, and a glance at the enlarged photograph of the doublestruck coin of Northampton shows how easily the discrepancy could arise.

The discovery of this die-link in particular must be considered to clinch the attribution of certain HAM coins to Northampton in the same way as the Seolca die-link with Winchester associated other coins of HAM with Southampton. Equally, of course, the new discovery may be thought to vindicate the reattribution of the ‘Greenwich’ coin to Cambridge. It only remains for us to express our thanks to Mr. Elmore Jones for allowing us to have plaster casts of the two coins in his collection, and to Dr. Nils Ludvig Rasmusson for the photographs of the coins in the Systematic Collection at Stockholm.

¹ P. W. P. Carlyon-Britton, ‘“Uncertain” Anglo-Saxon Mints and some New Attributions’, *B.N.J.* vi (1909), pp. 13–47.

THE MYTHICAL 'HELMET'/'LONG CROSS' MULES OF ÆTHELRÆD II

By R. H. M. DOLLEY

IN the 1881 edition of *Anglosachsiska Mynt* Bror Emil Hildebrand has listed two pennies of Æthelræd II which he describes as belonging to his 'Type E. Var. b'.¹ Such coins *prima facie* rank as Helmet/Long Cross mules, but, if Hildebrand's sequence is right, such mules ought not to exist, it being an almost invariable rule that the obverse of a late Saxon mule is of an earlier and not a later type.² Although indeed there has recently been published in these pages a mule coin of Æthelræd II where the obverse certainly is later than the reverse—the Second Hand/First Hand penny of Lewes in Mr. H. H. King's cabinet—these alleged Helmet/Long Cross mules cannot but cause the student to wonder whether perhaps Parsons and Brooke were right after all to transpose Hildebrand's sequence, and to place Helmet after Crux and before Long Cross, an arrangement which at least brings into juxtaposition the Crux coins proper and the excessively rare variety of Helmet which disposes the letters C-R-V-X in the angles of the reverse type.³

It must be said at once that the hoard evidence is quite decisive that Long Cross precedes Helmet—one has only to bring together such major hoards as those from List on Sylt, Igelösa in Skåne, Digeråkra on Gotland, and Gaulverbajær in Iceland, not to mention the Yholm hoard from Jutland which was known to Parsons and Brooke, to realize that Long Cross must be the earlier type.⁴ Consequently the coins of Lincoln and Wallingford which Hildebrand describes as of his 'Type E. var. b' are mules 'the wrong way round', and the purpose of this note is to suggest that there are arguments against their being English which enable us to leave them out of our calculations with a clear conscience. They do not 'fit'—and this may be thought in itself an argument against their authenticity—but patently it is much more satisfactory if they can be rejected on other and perhaps less subjective grounds.

A glance at the obverses of the two coins (Pl. V, A1 and B1) is sufficient to establish that they have one feature in common which sets them apart from the run of Helmet coins. This is the curious prolongation of the 'tail' of the helmet and its termination in a trefoil thus:



¹ B. E. Hildebrand, *Anglosachsiska Mynt*, 2nd ed., Stockholm, 1881, p. 97, no. 2018 and p. 153, no. 3914; cf. *ibid.*, p. 28.

² Cf. R. H. M. Dolley in *Commentationes de nummis saeculorum ix–xi in Suecia repertis*, Stockholm, 1961, pp. 155–72, &c.

³ Hild. Type Ec—*pace* Thompson (*Inventory*, p. 20) coins of this excessively rare variety were not present in the Burray hoard (*Inventory*, 61) which in fact has the same composition as that from Quendale (*Inventory*, 144 and 161), both finds being datable c. 1000.

⁴ Cf. R. H. M. Dolley and F. Elmore Jones in *B.N.J.* xxviii. i (1955), pp. 77–79.

I have found this feature elsewhere only in the case of three obverse dies which purport to be used by the London moneyer Edwine, and here it is remarked by Hildebrand in a footnote.¹ There is no doubt of course that an Edwine was an authentic London moneyer of Æthelræd II, and certain of his Helmet coins are of impeccable style and weight, e.g. Hild., nos. 2493, 2496, 2498, 2498 *bis*, and 2499 where the weights of unbroken specimens range between 1.16 and 1.50 grammes (18 and 23 grains). Significantly these certainly English coins are not die-linked with the three anomalous obverses already mentioned, and metrologically as well Hild. nos. 2492, 2492 *bis*, 2494, 2495, 2497, and 2635—the last misread and given to Godwine—stand quite distinct, the weights of unbroken specimens struck on round flans ranging between 1.45 and 1.81 grammes (22.5 and 28 grains). This far exceeds the norm for Helmet, and in itself is suggestive of Scandinavian workmanship. Suspicion can only harden when we find that the coins are from three obverse dies but only one reverse, and a Scandinavian origin may be thought clinched by the circumstance that Hild. 2495 and 2635 are struck on square flans with weights of 2.27 grammes (35 grains) and 2.52 grammes (39 grains) respectively. These critical coins are here illustrated (Pl. V, a–f).

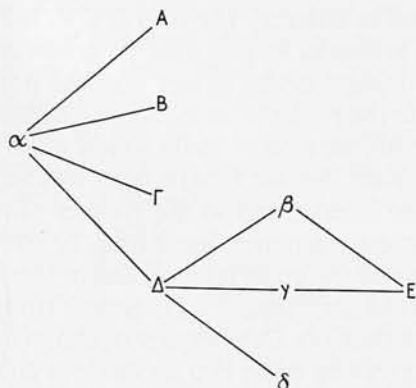
Already, therefore, there is a stylistic analogy which must cause suspicion to be thrown on the mule-coins of Lincoln and of Wallingford, and obviously they must be reconsidered very carefully with the possibility of Scandinavian workmanship very much to the fore. To take first the coin of Lincoln (Pl. V, A 1) it is perhaps noteworthy that Wulfmær ('Wulmær') is not known for the mint from a true coin of Helmet type. What is even more disturbing is that the mule (Hild. 2018) is of suspiciously high weight (1.71 grammes = 26.4 grains) for a coin presumptively struck to the Helmet standard, though Parsons and Brooke would be perfectly entitled to argue that this favoured their sequence of the types. What is not remarked by Hildebrand, however, is that Hild. 2015, 2016, 2017, and 2018 are all from the same reverse die (cf. Pl. V, A 1–A 4), and this has consequences which are disastrous for any theory that the Wulfmær in question was an English moneyer. Hild. 2016, for example, is of execrable style (Pl. V, A 2) and weighs 2.04 grammes (31.5 grains), while Hild. 2017 (Pl. V, A 3) is of only less peculiar workmanship and is struck on a square flan weighing 2.15 grammes (33 grains). It is Hild. 2015 weighing 2.02 grammes (31.0 grains) (Pl. V, A 4), however, which provides the real surprises. This obverse is of a style which cannot possibly be associated with the British Isles, and it also occurs with no fewer than three reverses concerning which Hildebrand himself wrote eighty years ago 'måste anses som falskmyntares arbete' ('they must be considered the work of forgers').² There are in the Systematic Collection at Stockholm five combinations of these dies, and the weights as well as the pattern of die-linking suggest a Swedish origin. From what we may call Die A (Pl. V, A 5) there is only one coin, but it weighs no less than 2.32 grammes (just under 36 grains), and this same reverse is used with a second obverse (Pl. V, A 6) to strike four coins weighing respectively 1.66, 1.74, 1.77, and 1.80 grammes (25.5, 27.0, 27.5 and 28 grains). From Die B (Pl. V, A 7) we have three coins weighing 1.44, 1.58, and 1.92

¹ B. E. Hildebrand, op. cit., p. 110, n. 2: 'På Adv. är nackskärmen på hjälmen prydd med 3 punkter.'

² B. E. Hildebrand, op. cit., p. 493.

grammes (22.0, 24.5, and 29.5 grains), and this die also is found combined with the same obverse die as Die A (Pl. V, A 8) to produce coins with the extraordinarily divergent weights of 1.09 and 2.00 grammes (say 17 and 31 grains). There are two coins from Die C (Pl. V, A 9), and they weigh respectively 1.80 and 1.95 grammes (28 and 30 grains).

There are found, then, springing from our 'Lincoln' mule no fewer than nine combinations of five obverse and four reverse dies which may be expressed diagrammatically thus:



and any student who has troubled to work out the pattern of die-linking among coins of the period which are incontrovertibly English will be reluctant to admit to the English series dies which are used in such intricate combinations to little or no apparent purpose. On purely stylistic grounds many of them would be rejected by the purest novice, and the average weight of the sixteen specimens readily accessible in the Systematic Collection at Stockholm is of the order of 1.80 grammes or 28 grains which would seem improbably high even if the median weight did not give the same result in a more significant form.¹

The position as regards the Helmet/Long Cross mule of Wallingford is only less unsatisfactory even though superficial respectability is conferred by the fact that the moneyer concerned, a certain Alfwold, is an undoubted Wallingford moneyer in the Crux, Long Cross, and Helmet types (cf. Hild. 3905–8 and 3910–13 which are of impeccable style and weight). If, however, we take the alleged mule, we find cause for suspicion in the weight as well as in the style. There are two specimens in the Systematic Collection at Stockholm, and one weighs 1.58 grammes (24.5 grains) and the other no more than 1.23 grammes (19 grains). Presumptively such mules were struck to the same standard as the Helmet coins proper—or to the Long Cross standard if Parsons and Brooke are correct—and it is a little disturbing, to say the least, that there is so great a discrepancy between these already too divergent figures and the weights of the other Long Cross and Helmet coins of Wallingford in the Systematic Collection. There are twelve Long Cross coins which are certainly English—Hild. 3890, 3892, 3898, 3899, 3910, 3911, 3917, 3919, 3924, 3927,

¹ For a recent numismatic exposition of the median, cf. B. Malmer in *Commentationes*, &c. (*supra*, p. 54, n. 1), pp. 281–8.

3931, and 3941—and their weights all fall between 1.63 and 1.73 grammes (25.0 and 26.5 grains), the average being a little over 1.67 grammes (just under 26 grains) and the median only fractionally lighter. Of five Helmet coins—Hild. 3902, 3902 *bis*, 3912, 3913, and 3942—two weigh 1.44 grammes and the others 1.45, 1.47 and 1.48 grammes, which suggests a weight-standard of at least 1.46 grammes (22.5 grains) with a tolerance of less than 0.05 of a gramme or half a grain on either side.

It will be noticed that I have left out of my calculations a thirteenth Long Cross coin allegedly of the mint, Hild. 3909, and here again my arguments are metrological as well as stylistic. The coin (**Pl. V, B 2**) is of wretched style, and weighs only 1.18 grammes or just over 18 grains so that it is something like 0.5 of a gramme or eight grains lighter than the norm. Significantly, too, it does not die-link into the group of coins that are certainly English, but there is a reverse die-link with the alleged mule which must surely be fatal to the authenticity of them both. So far I have been unable to find this obverse employed with another reverse, and so the Helmet obverse from the alleged mule remains for the present a nonce, but it must be stressed that my searches have not extended beyond the material recorded in the 1881 edition of *Anglo-sachsiska Mynt*. It will be surprising if a systematic study of the Scandinavian imitations preserved in the Coin Cabinet at Stockholm does not reveal a whole chain of die-linking involving these two anomalous coins from a reverse die purporting to be of Wallingford, but even if this should prove not to be the case it is abundantly clear that they have no place in the English series.

Consequently it must now be accepted that the Helmet/Long Cross mule is a myth, and thus there vanishes one of the last arguments that could still be advanced in support of the Parsons and Brooke transposition of the Long Cross and Helmet issues, a transposition which, as we have seen, flies in the face of the whole of the hoard-evidence. It is satisfactory, too, that there should now be vindicated the general principle that the obverse of a mule is the earlier of the two types, and this is of some importance for the student who wishes to place correctly in Æthelræd's sequence of coin-types the *Agnus Dei* pennies which have been the subject of such wild speculation.

THE MINT OF AXBRIDGE

By F. ELMORE JONES

THE Domesday Borough of Axbridge on the River Axe in North Somerset is, like Milborne Port the coinage of which formed the subject of a recent study by Mr. Dolley,¹ one of the rarest of the many rare Somerset mints.

Unlike Milborne Port, however, it is an attribution which has not met with unqualified acceptance since Carlyon-Britton first proposed its substitution for Hildebrand's Axminster in Devon (at any rate so far as certain indecisive readings are concerned) in the same paper in this *Journal* as that in which he proposed the substitution of Milborne Port for Hildebrand's Milton in Kent.²

This latter reattribution, as Mr. Dolley aptly remarks, was by no means so original as it may have appeared to be at the time but it is certain that to Carlyon-Britton must be given the credit for the first appearance of Axbridge on our numismatic maps of today.

That Axbridge is a place of great antiquity is not open to doubt; not only is it mentioned as a Borough in the Domesday Survey³ but it is also to be identified with the AXANBRYGE of the early tenth century Burghal Hidage.⁴

In this document its assessment is recorded together with the assessments of 29 other 'burhs', mostly to be located in Wessex and of which no less than 20 (including Axbridge) are readily identifiable as known Anglo-Saxon mints. In alphabetical order these are: Axbridge, Bath, Bridport, Buckingham, Chichester, Cricklade, Exeter, 'Hamton' (in this context undoubtedly Southampton), Hastings, Langport, Lewes, Lydford, Malmesbury, Oxford, Southwark, Wallingford, Wareham, Watchet, Wilton, and Winchester.⁵

For the distinction between Exeter and Axbridge in this document it is relevant to note that the former is EAXANCEASTRE a form which closely agrees with the coins.

AXANBRYGE is therefore a certain candidate for mint status in the late Saxon period and it is perhaps a little surprising that it was not so recognized either by Hildebrand or by the authors of the British Museum *Catalogue*.

This is especially the case when one considers the very full and distinctive

¹ 'Three West Country Notes', *B.N.J.* xxix (1959), pp. 61-64.

² 'Uncertain' Anglo-Saxon Mints and Some New Attributions', *B.N.J.* vi (1910), pp. 13-47.

³ See *V.C.H. Somerset*, i, p. 422 for details of these references. Perhaps the most significant are the statements therein that the survey records the number of burgesses as being 32 (which compares with 34 at Langport and 17 at Bruton) and that the third of the penny was paid to William the Sheriff of Somerset at the writ of the King for and on behalf of the burgesses of Ilchester, Langport, Milborne, Bruton, Axbridge and Frome. The inclusion of Frome is most significant but in quite another context (see *B.N.J.* xxviii (1958), pp. 504-8: R. H. M. Dolley, 'The Mysterious Mint of Fro').

⁴ A. J. Robertson, *Anglo-Saxon Charters*, Cambridge, 1939, pp. 246-7.

⁵ In regard to the remaining ten 'burhs' I am indebted to Mr. Dolley for the following interesting information: 'The Halwell and Pilton of the document were shortly to become the "burhs" of Totnes and Barnstaple respectively and as such both are, of course, well-known Anglo-Saxon mints. In the same way it is probable that Burpham and Eashing may have been the forerunners of Steyning and Guildford respectively and it is also possible that Tisbury may have been the forerunner of Shaftesbury. The Twynham of the document, although not at present known as an Anglo-Saxon mint, is, of course, well attested as a Norman mint. This leaves only four "burhs" for which no satisfactory identification can at present be suggested, viz. "Eorpeburnan", "Lyng", "Sceafstige" (which is *not* to be identified with Shaftesbury) and "Portchester".'

mint-signatures on at least two of the coins, namely ACXEPO on a coin in Stockholm and AXSAP on one in the British Museum, the latter even having a Somerset hoard provenance.

Keary and Greuber assign the AXSAP reading to Exeter which, even considering that their catalogue was compiled as long ago as 1894, must surely be regarded as a particularly unimaginative and unlikely attribution. It is therefore not at all surprising that three other coins in the National Collection of the same period with the mint-signatures shortened to CAX,¹ ACX and AXA three readings which are, of course, by no means so unequivocal, follow suit and are also given an Exeter attribution.

Hildebrand's approach to the problem of these indeterminate readings, although made some forty-eight years previously, was considerably better.

Hildebrand did not attempt an identification of ACXEPO and he missed two Harthacnut readings which can only be associated with that particular mint (unidentifiable though it may have been to him), one such reading lurking under Canterbury and the other under Oxford,² but he did not assign the two readings AXA and AXAN to Exeter.

These coins (three in number) are rightly catalogued separately but Hildebrand's attribution of them to Axminster in Devon, a town which it is certain did not possess borough status in the tenth and eleventh centuries, has not stood up to the test of time and has long since been rejected.

It was left to Carlyon-Britton writing in this *Journal* in 1910 (Vol. VI) to be the first to put forward the undoubted claims of Axbridge as a late Saxon mint and to propose the transfer thereto of both the AXSAP and ACXEPO readings.

It is a strange fact, however, that Carlyon-Britton wrongly coupled another of Hildebrand's unidentified mint-signatures with the ACXEPO reading, namely the 'AGEPOR' of the Edward the Confessor coin Hild. no. 3.

This is, in fact, a coin of Langport, a mint which was yet another of those under review in that same article in the context of the mint-signature LAG and it seems remarkable that Carlyon-Britton should have associated 'AGEPOR' with ACXEPO and not with LAG.³

The true reading of the Edward the Confessor coin is ON LAGEPOR which, when once the ligulation of the 'N' and 'L' is noticed, is virtually a perfect Langport mint-signature and the moneyer ÆGELWINE is also known in the same type with the unequivocal mint-signature LANCP (*B.M.C.* 609).

Although not relevant to Axbridge it may be remarked that ÆGELWINE also occurs on a unique coin of Canute *B.M.C.* type XVI (Lockett Sale, Lot 744) on which the mint-signature reads LAN. Conceivably (but improbably) this might stand for Launceston⁴ but obviously it can only otherwise denote Langport.

¹ This curious feature of the letter 'C' at the start of the mint name, which is found on no less than three Axbridge readings, is not confined to this mint. It also occurs on Oxford coins of the same period, cf. Hildebrand, Harold I, no. 817 and Harthacnut, nos. 157 and 159.

² Hild. nos. 15 ('Canterbury') and 164 ('Oxford').

³ For a final analysis of the mint-signature LAG see *B.N.J.* xxix (1959), pp. 65-66.

⁴ In which case it would be the second known Anglo-Saxon coin of this mint in existence, the only other at present known being the unique Ethelred II *B.M.C.* type 2A + BRVN M - O LANSTF in the British Museum.

For some reason, which is not apparent, Brooke's acceptance of Axbridge as an Anglo-Saxon mint was by no means an unqualified one.¹

It is strange, too, that Brooke omits ÆGELWINE as a possible Axbridge moneyer since he also accepts 'AGEPOR' as a possible Axbridge mint-signature but perhaps the inclusion of this latter was merely a clerical slip.

Brooke's list of moneyers is confined to the four Harthacnut moneyers (three of whom are now assigned to his joint reign of 1035 and one to his sole reign of 1040-2) known from coins with full mint-signatures, viz. GOLDA and GOLDCYTEL (possibly the same name—*B.M.C.*, nos. 1 and 2), LEOFRIC (Hild. no. 15—'Canterbury'), from which it would seem that Brooke too must have noticed this wrongly attributed coin since it is, I believe, unique, and LEOFWINE on the strength of Canute Hild. no. 1, the coin with the ACXEPO mint-signature which was then (1932) assigned to Canute but which can now be shown to belong to Harthacnut's sole reign.²

Carlyon-Britton's attribution to Axbridge did not go beyond the coins with the full readings of ACXEPO and AXSAP; he was undecided as to the attribution of Hildebrand's three 'Axminster' coins with the shortened mint-signatures of AXA and AXAN.

He was right, of course, to rule out the possibility of Axminster for these two readings (the first of which occurs on one coin of Ethelred II and one of Canute, and the second on one coin of Canute) but since none of the three moneyers concerned, Ælfnoth, Æthe— and Ælfric, are known to have used any more extended mint-signature and all three might conceivably fit an Exeter attribution,³ Carlyon-Britton considered it better to assign them to either Exeter or Axbridge.

Following this lead Brooke omits the names of these three moneyers from his list in *English Coins*. It is in fact only since the late Anglo-Saxon coins in the British Museum have been rearranged under mints and the classification brought into line with present-day attributions that the coins of the Axbridge mint in the National Collection have received their proper recognition.

¹ *English Coins*, p. 69.

² P. J. Seaby, *B.N.J.* xxviii (1956), pp. 111-46.

³ Ælfnoth is, of course, a particularly well-attested Exeter moneyer of Ethelred II not only in the same type as the AXA coin but also in the types which precede and follow it. It is consideration of this factor which has always made any alternative attribution seem suspect (not that there is any valid reason why this should not be yet another of the many instances of the coincidence of two moneyers with the same name striking at two mints with very similar mint-signatures), but this is a factor which is not applicable in the case of Ælfric. It is, of course, impossible to say whether it is a factor which does, or does not, apply to the partially identifiable name Æthe— which is only known from a unique cut halfpenny of Canute in Stockholm (Hild. no. 6). In this connexion the following footnote of Mr. Dolley's to his paper on 'The Earliest Penny of the Bruton Mint' in *Num. Chron.* (1959), p. 185, is most relevant. 'A few early (i.e. 980) coins have a mint-signature EXAN or an extension thereof. A signature EAXA for Exeter is not recorded for the reign in Hildebrand, Nordman or B.M.C.' I feel that the matter is clinched quite conclusively in the case of the two Canute moneyers Ælfric and Æthe— especially when it is borne in mind that for that particular period, i.e. 1017 to 1030, the norm for Exeter readings has changed and has become EXECE which is even less likely to be varied to AXA(N). Possibly there may still remain some slight doubt in the case of the Ælfnoth AXA coin of Ethelred II which is some twenty years earlier and for which there is no corroborative evidence to help either the one (the Exeter) or the other (the Axbridge) attribution. However, I feel justified in claiming that all three coins with the AXA reading should be assumed to have emanated from the same mint and that such mint is not Exeter. It will be realized, of course, that there is nothing new in this and that I am simply following Hildebrand's lead (a lead not followed by Brooke) but, whereas Hildebrand assigned the coins to Axminster and Carlyon-Britton was inclined to sit on the fence, I am now assigning all three to Axbridge.

In the result no less than five coins are now placed to this mint including two of Canute with the seemingly indeterminate mint-signatures of AXA and ACX and an 'uncertain' coin of the same reign (*B.M.C.* no. 612).

For the +LODA ON ĆSPA of *B.M.C.* this latter coin is now read as +ĒLODA ON [A]ĆSPA (for the sake of clarity the numerous pellets between the letters are omitted) and once it is recognized that the letter missing from the coin must be A and that the two last letters are transposed the resultant mint-signature conforms very closely to other undoubted Axbridge readings.

It is of interest to note that this coin, which is illustrated in Ruding¹ and has lain in the British Museum for well over 100 years, has hitherto defied all attempts at the identification of either the mint or the moneyer.

The name of a second unpublished moneyer for the mint viz. HUNEWINE has also recently come to light in the same reign, mainly as a result of Mr. Dolley's activities in Stockholm, and it is indeed a remarkable coincidence that this discovery should follow on so soon after the emergence of this same name as that of an unpublished moneyer of Lydford in this same type.

This latter results from Mr. Dolley's correction of two mis-read coins in Hildebrand, one merely a large fragment, and is yet another instance of his brilliant work in this field.²

It may be of interest to record that HUNEWINE, this very well-attested West Country name, is now known from the coins of no less than six Wessex mints, three (Exeter, Lydford, and Totnes) in Devon and three (Axbridge, Ilchester, and Watchet) in Somerset.

It is mainly as a result of the recent emergence of the names of these two unpublished moneyers (GODA and HUNEWINE) that I have been prompted to write this study of the mint but I have long felt that a review of the subject was overdue.

It would seem that very little, if indeed anything at all, has been written on it since Carlyon-Britton's paper in *B.N.J.* 1910, although I suspect that Mr. Dolley was on the point of tackling it and that this paper of mine may well have forestalled yet another of his West Country Notes.

My main objectives in writing it are (1) to show that Brooke need not have had any qualms about the acceptance of Axbridge as an Anglo-Saxon mint and (2) to publish a revised catalogue of the coins with a plate in illustration of as many of them as possible.

The table which follows overleaf summarizes the history of the mint and its moneyers and also records the mint-signatures appearing on the coins of the different types. These mint-signatures are remarkably varied considering the sparsity of the coins and the comparatively short period which they span. They all stem from three alternative forms of the name AXANP, AXSAPO, and ACXEPO³ all of which undoubtedly represent one and the same place of mintage.

¹ *Annals of the Coinage*, pl. 20, no. 23

² *B.N.J.* xxix (1959), pp. 66-68.

³ The transition in the form of the name from the AXANBRYGE of the Burghal Hidage to the ACXEPO(RT) of the mid-eleventh-century coins does not invalidate a claim that both spellings denote the same place. Changes in the forms of place names within the period of 100 years plus with which we are concerned here are by no means uncommon and many other instances spring to mind. The Burghal Hidage itself provides another instance, Hastings being HESTINGCEASTRE in the document and HESTINPOR on some mid-eleventh-century coins.

On the evidence of this table it will be seen that the mint cannot have been operative for more than about forty years, i.e. from c. 1000 to 1040, and also that its activity was very spasmodic. In this respect it is of interest to note that it follows much the same pattern as that of three of the other smaller Somerset mints.

Moneyer	Reign and Type									Mint signature
	Ethelred II		Canute			Harold I	Harthacnut			
	B.M.C. IVa	Subsequent types	B.M.C. VIII	B.M.C. XIV	B.M.C. XVI	Both types	B.M.C. 1 (right facing)	B.M.C. 2	B.M.C. 2 (reading ENVT)	
Ælfnoth Ælfric	⊕	Unknown in any of these Types →	⊕			→		→		AXA AXA and AXAN AXS AXA [A]CSPA ACX (Canute) ACXEPO (Harthacnut) CAXNP AXSAP and CAXSA CAX
Hunewine Æthe— Goda Leofwine			⊕	⊕	⊕	Unknown in either Type →		Unknown in this Type →	⊕	
Leofric Golda							⊕			
Goldcetyl							⊕			

Axbridge, in common with Bruton, Crewkerne, and Milborne Port,¹ opens up on the smallest possible scale in Ethelred II's Longcross type (*B.M.C.* 4a) which ran from c. 997 to 1003; in common with those three mints it too is dormant until c. 1018 when it reopens in Canute's first type (*B.M.C.* viii).²

¹ Bruton. *Num. Chron.* 1959, pp. 183–5; Crewkerne. *B.N.J.* xxviii (1956), pp. 99–105; Milborne Port. *B.N.J.* xxix (1959), pp. 61–64.

² It will be noted that the Axbridge coins of this type are of two quite different styles, HUNEWINE'S coin being of one style and the two coins of ÆLFRIC of another. It is significant that these two styles are both predominantly associated with the mint of Ilchester and that neither occurs at Exeter, all the coins of which are of yet a third West Country style, the very distinctive 'Exeter' style itself. Ælfric's two coins are both characteristic examples of a stylistic group which is, in fact, confined to the county of Somerset. It is a style which has no very marked characteristics but which is, I think, fairly easily recognizable; the Cadbury/Bruton *obv.* die link (*B.M.C.* ii, pl. xvii, no. 6) which is illustrated and discussed by Mr. Dolley in *B.N.J.* 1956, p. 104, is another typical example. The HUNEWINE coin is of quite a different style and one which is, possibly, even more closely associated with Ilchester. It, too, is a typical example of this very distinctive and easily recognizable 'Ilchester' style. Although predominantly associated with Somerset this style does make one incursion into Devon, namely at Lydford, at which mint it occurs alongside 'Exeter' style coins. *B.M.C.* ii, pl. xviii, no. 10, a Lydford coin of the moneyer Sæwine, is a fine example. Another is the recently published and apparently unique Hildebrand coin of Lydford to which reference is made earlier in this paper. Of the coins in Hildebrand four (nos. 2862–5 of the moneyer SÆWINE) are of 'Ilchester' style and two (nos. 2860 and 2861 of the moneyers BRUNA and GODRIC respectively) are of 'Exeter' style. BRUNA and GODRIC are both Lydford moneyers in the immediately preceding type (the last type of Ethelred II) whereas HUNEWINE and SÆWINE are not, apart from these 'Ilchester' style coins of Canute's first type, otherwise known. Taking this into consideration is it significant that the coins of the latter two moneyers (HUNEWINE and SÆWINE) conform to 'Ilchester' style whereas those of the former two (BRUNA and GODRIC) conform to 'Exeter' style? Is it possible that LYDANFORD is

In that year output was very considerably stepped up at any rate at both Axbridge and Crewkerne, but not apparently to quite the same extent at Bruton and apparently not at all at Milborne Port where Canute type VIII is unknown. Output again dwindles at all four mints with, in the case of Axbridge only, what would seem to have been a remarkable revival of activity under Harthacnut both in his joint and sole reigns. All four mints peter out altogether at different times between 1035 and 1042 and apparently not one of them was in operation under Edward the Confessor.

The catalogue at the end of this paper records details of all the nineteen coins of the Axbridge mint which are known to me; it is in the form of a 'miniature corpus', as used by Mr. Dolley for his study of Milborne Port and all the coins are illustrated on the plate (Pl. VI, 1-19). Unfortunately one coin (no. 2 on the plate) cannot be reproduced photographically as its present ownership is unknown.

From this catalogue it will be seen that 5 coins are in the British Museum, 9 are in Stockholm, 3 are in Copenhagen, and only 2 are in private ownership in this country, of one of which (and the evidence for its existence does not extend beyond a description in Sainthill, albeit a convincing one)¹ the present whereabouts are unknown. Fortunately this coin is almost certainly a die duplicate of the Stockholm coin, the controversial Ethelred II, Hild. no. 5.

It will be apparent too that no less than 6 of these 19 coins belong to the reign of Harthacnut whose coins (even allowing for the fact that Canute B.M.C. type XVII is now recognized as being a coinage of Harthacnut's sole reign) are as rare as any in the late Saxon period.

This is an exceptionally high proportion and is one which I am sure cannot be equalled at any other mint.

Further, this feature is not confined to the coins in the British Museum where the proportion is 2 in 5; the proportions of 3 in 9 and 1 in 3 in Sweden and Denmark respectively are also abnormally high.

It will be noted too that the number of Axbridge coins in this country compared with the corresponding number in Scandinavia, viz. 7 and 12 respectively, is surprisingly high and, for example, compares with 3 and 10 respectively in the case of Milborne Port.

The reason for this difference is of course to be sought in the incidence of the accident of discovery since no less than four of the five Axbridge coins in the British Museum came from the Wedmore find of 1853 (Thompson, *Inventory*, no. 374 but all four being there listed as 'Exeter'). Wedmore is a near neighbour of Axbridge (it is actually the adjoining parish) and is therefore a find spot which is only a few miles distant from the place of mintage of the coins.

another instance of two mints of the same name being in operation at the same time, one the undoubted mint of Lydford in Devon and the other Lydford-on-the-Fosse in Somerset? For the present this interesting, but highly speculative, possibility cannot be taken any further but I am hopeful that recent research in this field may bring fresh evidence to light. To sum up, it is not claimed that the style of the three Axbridge 'Quatrefoil' type coins is conclusive evidence for a Somerset mint attribution. There is always the possibility of the existence of a coin which is an anomaly at any mint within the general limits of the regions covered by the various stylistic groups but it is claimed, however, that considerations of style rule out Exeter as a likely attribution and that the attribution to a Somerset mint is a far more convincing one.

¹ *Olla Podrida* (1853), ii, pl. 26, no. 4.

The writer considers it not improbable that other coins of Axbridge may exist in this country, quite possibly assigned to Exeter, and he would welcome any such being brought to his notice.

It would be particularly gratifying if the other halves of the reading of the two unique cut halfpennies in Stockholm (**Pl. VI, 10 and 15**) were to come to light or if the present whereabouts of the 'missing' coin of the Sainthill wood-cut could be located.

In conclusion I should add that it is obvious that a paper such as this could not have been written without the co-operation of the authorities of the Coin Rooms of Copenhagen, Stockholm, and London who supplied the direct photographs which illustrate it and to whom my very grateful thanks are extended. The extent of the help which I have received from Mr. Dolley in filling in much of the background for this paper must be equally obvious and to him in particular I am especially grateful.

THE AXBRIDGE MINT—A CATALOGUE OF THE COINS

(B.M. = British Museum: F.E.J. = writer's collection: K = Royal Coin Cabinet, National Museum, Copenhagen: SHM = Royal Coin Cabinet, National Historical Museum, Stockholm.)

ETHELRED II (978–1016)

LONGCROSS ISSUE. (Hild. D = *B.M.C.* IVA = Brooke 5 = Hawkins 207.)
(*Michaelmas* 997–*Michaelmas* 1003?)

MONEYER: *Ælfnoth*

1. *Obv.* +ÆDEL RÆDREX ANGLOR

Rev. +ELF/NOÐ/MOQ/XX

(a) SHM, Hild. 5—hoard provenance not recorded. (**Pl. VI, 1**)

(b) In 1853 in possession of Sir Montague L. Chapman (cf. R. Sainthill, *Olla Podrida*, ii, p. 149 and pl. 26, no. 4)—not now traced. (**Pl. VI, 2**)

CANUTE (1016–35)

QUATREFOIL ISSUE. (Hild. E = *B.M.C.* VIII = Brooke 2 = Hawkins 212)
(*Michaelmas* 1017–*Michaelmas* 1023?)

MONEYER: *Ælfric*

2. *Obv.* +CNVT REX ANGLORVM

Rev. +ELF/RIC/ONX/XXN

(a) SHM, Hild. 5—hoard provenance not recorded. (**Pl. VI, 3**)

(b) SHM. Hild. 5 *bis*—hoard provenance not recorded. (**Pl. VI, 4**)

(c) K—hoard provenance not recorded. (**Pl. VI, 5**)

3. *Obv.* +CNVT REX ANGLOR

Rev. +EL/FRI/CON/XX

(a) B.M., *B.M.C.* 56—from the 1853 Wedmore Hoard. (**Pl. VI, 6**)

(b) SHM, ex Kviende (parish of Othem, Gotland) find (*Inv.* 21613). (**Pl. VI, 7**)

MONEYER: *Hunewine*

4. *Obv.* +C̅NVT REX ƿ̅N̅G̅L̅O̅R̅V

Rev. +HV/NEP/INEO/ƿ̅X̅S̅

(a) SHM. ex Botvalde (parish of Väte, Gotland) find (*Inv.* 23228). (Pl. VI, 8)

(b) F.E.J. ex Grantley lot 1144—without hoard provenance. (Pl. VI, 9)

POINTED HELMET ISSUE. (Hild. G = *B.M.C.* XIV = Brooke 3 = Hawkins 213)
(*Michaelmas 1023–Michaelmas 1029?*)

MONEYER: *Æthe—*

5. *Obv.* +C̅NVT R/ —

Rev. +ÆÐE — ƿ̅X̅ƿ̅

SHM, Hild. 6—hoard provenance not recorded. (Pl. VI, 10)

MONEYER: *Goda*

6. *Obv.* +C̅NVT/REX ƿ̅F̅

Rev. +•G̅•O̅•D̅•ƿ̅ ON [ƿ̅]C̅P̅ƿ̅

B.M., *B.M.C.* 612—hoard provenance not recorded but ex Miles 1820 and Tyssen 1802. Illustrated in Ruding, pl. 20, no. 23. (Pl. VI, 11)

SHORTCROSS ISSUE. (Hild. H = *B.M.C.* XVI = Brooke 4 = Hawkins 208)
(*Michaelmas 1029–Michaelmas 1035*)

MONEYER: *Leofwine*

7. *Obv.* +C̅NVT/•REC̅X

Rev. +LEOFPINE ON ƿ̅CX

B.M., *B.M.C.* 78—from the 1853 Wedmore hoard. (Pl. VI, 12)

8. *Obv.* +C̅NVT/REC̅X

Rev. +LEOFPINE ON ƿ̅CX Same die as preceding coin.

K, ex Lübeck find. (Pl. VI, 13)

HARTHACNUT

(*Joint Reign 1035–7*)

JEWEL CROSS ISSUE—*right facing bust* (Hild. A^a = *B.M.C.* IA = Brooke I
= Hawkins 216)

(*Winter of 1035/1036?*)

MONEYER: *Golda*

9. *Obv.* +Hƿ̅RD/C̅NVT RE

Rev. +GOLDƿ̅ ON ƿ̅XSƿ̅••

B.M., *B.M.C.* 1—from the 1853 Wedmore hoard. (Pl. VI, 14)

Obv. +Hƿ̅RD/ — TRE Same die as preceding coin.

Rev. + — NCƿ̅XSƿ̅•• Probably this moneyer.

SHM, Hild. 164—hoard provenance not recorded. (Pl. VI, 15)

MONEYER: *Goldcytel*

11. *Obv.* +Hƿ̅RÐƿ̅/C̅NVT RE

Rev. +GOLD • CYTƿ̅ ON C̅X̅••

B.M., *B.M.C.* 2—from the 1853 Wedmore hoard. (Pl. VI, 16)

MONEYER: *Leofric*

12. *Obv.* +HĀRDĀ/CNVT RE

Rev. +LEOFRIC ON CĀ.XNP

SHM, Hild. 15—hoard provenance not recorded. (Pl. VI, 17)

HARTHACNUT

(*Sole Reign 1040–2*)

ARM AND SCEPTRE ISSUE *reading* CNVT (Hild. Canute (I) = *B.M.C.* Canute XVII
= Brooke Canute 5 = Hawkins 209)

(*Summer 1040–Summer 1042?*)

MONEYER: *Leofwine*

13. *Obv.* +CNV/TR EX ĀNG

Rev. +LEOFPINE ON ĀCXEPO

(a) SHM, Hild. Cnut 1—hoard provenance not recorded. (Pl. VI, 18)

(b) K, ex Thomsen 9034. (Pl. VI, 19)

ADDENDUM

Since this paper was written Mr. Dolley has discovered that Sir Montague Chapman's collection passed to Sir Benjamin Chapman and that it was dispersed at Sotheby's on 8 November 1894. The 'AXA' coin (No. 1(b) in this Catalogue) was doubtless among the 20 coins of the same type forming Lots 23 and 24 which included two assigned to Exeter, the coins simply being listed under Mints in the sale catalogue without any readings being given. The two lots fetched a total of 32s. and were purchased by Mr. Lincoln—doubtless for stock. The presumption must be that the 'AXA' coin was from an Irish find and that Hildebrand's 'Axminster' attribution of 1881 was not appreciated by the cataloguers.

A NOTE ON THE ANGLO-SAXON MINT OF READING

By R. H. M. DOLLEY

IN the 1932 edition of *English Coins* G. C. Brooke attributed (p. 75) to a mint at Reading certain coins of Æthelræd II (moneyer Æthe(l)stan) and of Edward the Confessor (moneyers Brihtric and Corff). In the 1950 Supplement, however, an entry (p. 255) implies that all the coins concerned had been misattributed, and consequently that Reading was not in fact a mint in the late Saxon period. In this present note it will be argued that the 1932 and the 1950 pronouncements alike stand in need of emendation, and in this connexion it will be convenient to consider not only three apparently unique coins which seem to underlie the 1932 statement, but also two coins which have been attributed, albeit very much less confidently, to Reading within the last decade.

In order of their date of issue the five 'Reading' coins may be listed as follows:

(a) Lockett 684 (c). This coin purports to belong to the *Crux* issue of Æthelræd II, and as such should be dated *c.* 995. The name of the moneyer would appear to be 'Noae', an irregular and otherwise unattested monothematic form which is not obviously hypocoristic and which in itself gives every cause for suspicion.

(b) An apparent Last Small Cross penny of Æthelræd II now in the Ashmolean Museum and formerly in the Bodleian Library (cf. Wise, *Catalogus Nummorum*, pl. xvii, 11). Here the presumptive date would be *c.* 1010. The moneyer is apparently Æthe(l)stan.

(c) Hild. Edw. Conf. 634. The name of the moneyer is given as Brihtric, and the coin belongs to the Trefoil Quadrilateral issue and is to be dated *c.* 1047.

(d) Hild. Edw. Conf. 635. The name of the moneyer there appears as EORFF which must be for Corff, and the coin is of the same type and date as that of Brihtric already cited.

(e) An apparent Pointed Helmet penny of Edward the Confessor which is described in the report of the great Sedlescombe hoard (*Inventory* 327). The presumptive date of this coin would be *c.* 1055, and the moneyer is recorded as 'Lucine'.

Coins (b), (c), and (d) may be presumed to have formed the basis of the original Brooke entry.

Of coin (a) it may be observed that the Lockett catalogue adds a point of interrogation after the attribution, hints at the possibility of Danish origin, and does not illustrate it. There is also a reference to p. 385 of the third volume (1906) of the *British Numismatic Journal*. The attribution to Reading will be found to be that of the then owner, W. C. Wells, and the penny was in fact illustrated as No. 12 on the Exhibits Plate opposite p. 351. Clearly the coin was one known to Brooke, and so his rejection of it must be deemed deliberate

and not dismissed as due to oversight. A duplicate was formerly in the Argyll cabinet, and examination of either specimen should be sufficient to convince any serious student of the late Saxon series that we are dealing not with English coins but with a Scandinavian (Hiberno-Norse?) imitation of the cruder sort.

Coin (b) presents problems of quite a different order. To begin with, the very provenance points to its having been discovered in these islands, a supposition that may seem to be corroborated by the absence of 'pecking'. It is here illustrated by enlarged photographs of casts which have been supplied by the kindness of the authorities of the Heberden Coin Room:



FIG. 1.

In the British Museum, incidentally, are some old casts inscribed 'Bodley', and so we can be reasonably certain that it is this particular coin which underlies the Brooke entry of 1932.

The mint-signature is by no means clearly and indisputably RAID, and it is a curious fact that even if it were, this form in itself should have precluded from the first any attribution to the Berkshire borough in question. One has only to consult the *Oxford Dictionary of English Place-Names* to discover that the early spellings are consistently READ- or RED-, and these OE spellings are of course consonant with the occasional ME—but *not* OE—form in RAD- (cf. the Edward III pence with reverse legend 'Villa Radingy'). The most superficial survey of the late Saxon coinage, moreover, should be sufficient to establish that English—as opposed to Hiberno-Norse—die-engravers virtually eschewed spellings 'ai' except very occasionally at one or two Danelaw mints when attempting a palatal 'g'. Even on coins of an earlier epoch such spellings are notably rare, and the normal writing of the digraph is 'æ'. It is of course possible in certain circumstances for 'æ' to appear on coins as 'a' (e.g. Athelwold for Æthelwald), but OE 'a' or 'ea'—despite the occasional and very exceptional writing 'æa'—does not become 'æ' on coins before c. 1025, and then only very intermittently and as a quirk confined to the Danelaw. The numismatist, therefore, who would regard RAID as a possible mint-signature

for Reading under Æthelræd II is asking us to believe not only that the die-engraver employed an irregular writing of 'e(a)' but that he cast it in a form that is unprecedentedly archaic. In combination the two improbabilities may be thought to amount to impossibility.

As we have seen, 'ai' is a letter-combination that eleventh-century English die-cutters normally are found to avoid, and even on earlier coins it is a quite exceptional writing of 'æ'. In passing, therefore, we should perhaps consider the possibility that RAID is for RÆD, and that an English mint other than Reading is involved, but a glance at Professor Smith's *English Place-Name Elements* establishes that OE *raed* is almost never found as a place-name element, and certainly not in the case of a site where a mint could conceivably have existed in the eleventh century. It is indeed virtually impossible for us to reconcile RAID with an English mint, and at this juncture it is worth recalling that it is quite a characteristic feature of the legends of Hiberno-Norse imitations of Anglo-Saxon coins that the letter 'i' is interjected where it does not belong (e.g. GIODPINE for GODPINE). Is it possible, we should now ask ourselves, that the RAID coin could be Hiberno-Norse?

With this possibility in mind we should begin by examining again the obverse. The first detail that comes to notice is that the 'X' in REX is rendered '+', a characteristic not of English but of Hiberno-Norse epigraphy. This detail is not of course conclusive, but it is at least a pointer. Other non-English characteristics of the legends are the substitution of 'E' for the digraph 'Æ' and the omission of the bar from 'Ð', features, however, that are quite normal in the case of coins emanating from the Dublin mint. The style of the portrait, too, is not nearly so English as it may seem at first sight, and the divergencies become more and more apparent when an attempt is made to classify the bust according to the principles propounded in *Antikvariskt Arkiv* 9. There are certain affinities, perhaps, with coins from the Chester area, but on balance the coin must be said to defy classification. If, however, the RAID penny is placed beside Hiberno-Norse coins of the same class, the difficulties all melt away, and any student who has handled in any quantity the Last Small Cross pence of Sihtric—a number of which in fact purport to be of Æthelræd—will have no hesitation in appropriating this mythical penny of 'Reading' to the Dublin series.

Why the RAID penny has not been recognized as Irish before now is another problem. At the root of the matter is the fact that very few Hiberno-Norse coins of this critical issue have been illustrated. Roth, for example, in his elaborate survey in the 1909 *British Numismatic Journal* can find room for only one (op. cit., Pl. I, 1), while Dr. Liam O'Sullivan was precluded from illustrating more than one specimen by the type's absence from the Irish National Collection at the time that he was preparing his most valuable paper in the Centenary Volume of the *Journal of the Royal Society of Antiquaries of Ireland*. A solitary specimen was engraved for Simon, while Lindsay and Grueber between them cannot muster as much as one. Even the Parsons (1929) and Lockett (1957) sale-catalogues illustrate no more than one example apiece, and here too it is unfortunately the coins which read SIHTRIC and not ÆTHELRÆD which are chosen for this purpose, although in point of fact the latter are much the rarer. Recently, however, several have been

reproduced in connexion with notes in the *Numismatic Circular* (cf. December 1960, p. 261, March 1961, pp. 59–60, &c.), and the forthcoming British Museum fascicule of the British Academy's *Sylloge* should go far towards making available in illustration a representative sample of coins of the type under discussion.

Already the RAID coin should be given both on grounds of epigraphy and of style to the Hiberno-Norse series, and there is a little more evidence that the new attribution is the correct one. Generally speaking Hiberno-Norse coins of this class either essay the Dublin mint-signature (cf. coins of the moneyers 'Ælfelm', Colbrand, 'Færemin', and 'Ndremin'), or imitate more or less plausibly the legends on the English prototypes. As might be expected, a very high proportion of these prototypes are from mints in the parts of England opposite Ireland (e.g. Chester), and it is with this at the back of our minds that we should consider anew the legend:

+EDESTANONR (or B?) AID

Clearly by a form EDESTAN the engraver is attempting the name Æthe(l)-stan, and in England in the Last Small Cross type we find a moneyer of this name striking at Bath, Bedford (?), Exeter, Huntingdon, and Lydford. Already, too, it has been demonstrated that the Dublin engraver had copied one coin of Bath of the very moneyer concerned (*Numismatic Circular*, March 1961, p. 60), and a moment's reflection will show that +HDLSTAN ON BADI and +EDESTAN ON RAID both have been prompted by coins such as Hild. Æthelræd 51 and 52 with readings +ÆDESTAN ON BAÐ and +ÆDESTAN ON BAÐAN. In this connexion it may be remarked that coins of the Bath mint have occurred in a number of Ostmannic hoards, examples that come at once to mind being those from Dungarvan (*Inventory* — but Bonser 9245), Andreas II (*Inventory* 9 but to be dated c. 1050 and not 'Xth century') and Dunbrody (*Inventory* 141 but cf. my forthcoming note on the mint of Berkeley). Close inspection of the 'Reading' coin, moreover, reveals that the initial 'R' of the mint-signature is to say the least dubious, and a detailed study of the epigraphy of the Hiberno-Norse coinage cannot but foster the impression that the engraver was essaying a 'B'. In other words the mint-signature is BAID and not RAID, and the association not only with Bath but with Hild. Æthelræd 64, the BADI coin of 'Edestan' recently die-linked into the Hiberno-Norse series, may be thought to have been established beyond all reasonable doubt.

A quick check of the more accessible material has failed to produce the die-link between the RAID coin and Dublin which would settle the matter once for all, but it will be surprising if the Scandinavian hoards—or even a new find from Ireland—do not throw up sooner or later a coin from the same obverse die with a certain Dublin reverse, or alternatively a coin from the same reverse with a Sihtric obverse. The weight of the RAID coin, 16.7 grains, not only is an argument against its being English but is completely consistent with the view that the coin is Hiberno-Norse. In *Anglo-Saxon Coins* Miss V. J. Butler has just published some figures for the Last Small Cross type of Æthelræd II (p. 205) which suggest that even the lower weight-standard was in the region of 20 grains, and in the 1959 *British Numismatic Journal* (p. 281)

it has been shown that 75 per cent. of the Last Small Cross type coins of Dublin weigh between 16 and 20 grains, and 33·3 per cent. between 16 and 17½ grains. Even without the die-link, therefore, the case for attributing the RAID or rather BAID coin to the Hiberno-Norse series is truly formidable, and one cannot but endorse the discretion of the anonymous editors of the 1950 Supplement when they refused to accept the 'Æthestan' coin as evidence for an Anglo-Saxon mint at Reading.

Coin (c) is a case of simple misattribution. As Mr. F. Elmore Jones pointed out to the writer a number of years ago, Brihtric is a Petherton moneyer in the preceding type (cf. Lockett 796), and his suggestion that the penny would be found to read PEDI and not REDI has been more than vindicated by inspection of the original coin. Both Miss van der Meer and the writer, moreover, have come across quite independently a third coin of the mint and moneyer in one of the unpublished Swedish hoards, but the whole question of the mint of Petherton is one that merits a separate note. Here it is sufficient once again to record that the judgement of the editors of the 1950 Supplement was eminently sound.

In the case of coin (d), however, one suspects that mistranscription was inferred where it did not in fact exist. Suitably enlarged direct photographs of the unique Stockholm coin reveal beyond all shadow of doubt the essential



FIG. 2.

accuracy of Hildebrand's transcription of the reverse legend. The mint-signature READIN is impeccable, and there is absolutely no possibility of misreading. Even though, then, Corff is otherwise known only at London, the attribution of this coin to Reading seems inevitable, and in this case we must not forget that Brooke had had one very real advantage over the 1950 editors in that he had been able to make a fleeting examination of the Systematic Collection at Stockholm, and so could be certain that READIN was the mint-signature and not a semi-erased LVNDEN liable to be misread. It is the opinion of the writer, then, that Hild. Edw. Conf. 635 is an authentic coin of the Reading mint, the only Anglo-Saxon coin struck there which has survived, but not the less genuine for that.

Coin (e) rests entirely on the testimony of two nineteenth-century provincial antiquaries, W. A. Raper and E. H. Willett, the latter admittedly a numismatist of some experience. In their account of the great Sedlescombe hoard, a portion apparently of the bullion reserve of the Hastings mint, they record a Pointed Helmet penny of Edward the Confessor with reverse legend:

+L:VE·INE ON RÆDIN

It is remarkable that the same transcription occurs both on p. 12 and on p. 32 of the 1883 volume of the *Sussex Archaeological Collections*, and it must surely be inferred that the reading—though not the interpretation—is uncontroversial, i.e. that the legend as recorded is no more than superficially different from that which in fact appears upon the coin. In fact the transposition of a single stroke in the Raper and Willett transcriptions is all that is necessary for the coin to be given with confidence—and infinitely greater plausibility—to a well-attested mint where the moneyer is known. Indeed the reattribution is so obvious that one feels that it must already have been made instinctively by Brooke.

The first feature to be noted is that a numismatic spelling RÆDIN(g) for READIN(g) is extremely improbable, and to find a comparable and even then quite exceptional numismatic replacement of 'ea' by 'æ' before 'd' one would have to go back some thirty years to the reign of Cnut. Moreover, as Mr. J. D. A. Thompson has remarked in the *Inventory*, the combination of letters which occupies the space where the moneyer's name might be expected to appear cannot be reconciled with the name of any of the Reading moneyers given by Brooke. Clearly, however, the die-engraver was essaying LUFINE, at this period a very frequent misinscription for LYFINE, and Lyfinc—thanks to his celebrated gold penny with the types of the preceding issue—is the Warwick moneyer *par excellence* of Edward the Confessor. The suggestion of this paper, therefore, is that the coin seen by Raper and Willett in fact read:

+L:VFINE ON PÆRIN

So far the writer has not been able to trace a Lyfinc penny of Warwick of this type, but one is cited by Mr. D. F. Allen in the 1948 *British Numismatic Journal*. Unfortunately details of the legends are not given there, but the plausibility of the present hypothesis can be gauged from the fact that Mr. Allen does record a coin of the immediately preceding issue with reverse legend:

+LVEINE ON PÆRIN

One has very little hesitation, therefore, in emending the entry on p. 121 of the *Inventory* from '... Reading: uncertain moneyer L:VC·INE 1...' to '... Warwick: Lyfinc, 1...' with a consequential alteration on p. 161 of the index. The footnote in this case might perhaps be recast to run something as follows: 'Misread and misattributed by Raper and Willett to Reading.'

To sum up. There is only one Anglo-Saxon penny which can be given with any degree of confidence to Reading, the unique Trefoil Quadrilateral penny of Edward the Confessor in the Systematic Collection at Stockholm (Hild. Edw. Conf. 635). The Edward the Confessor coins of Brihtric and Lyfine ('Lucine') can be shown to be misattributed coins of Petherton and of Warwick respectively. The 'Æthelræd II' coins by 'Edestan' and 'Noae' are Scandinavian imitations, the former certainly hailing from Dublin and the latter perhaps from the same area. Thus, in any future edition of *English Coins*, the Reading entry in the lists at the end of Chapter VI will have to take the following form:

READING (Readin): Corff (Ed).

A SMALL PARCEL OF PENNIES OF THE CONFESSOR FROM THE SEDLESCOMBE FIND

By R. H. M. DOLLEY

IN the course of a recent visit to the Co. Limerick, I was shown by a private collector a little group of silver pennies of Edward the Confessor. They are believed all to have been purchased from Dublin and/or London dealers at the end of the nineteenth century, and, as we shall see, there can be little doubt that the Sedlescombe hoard from Sussex (*Inventory* 327) is the source of almost all the coins in question. This great treasure, almost certainly part of the bullion reserve of the Hastings mint at the time of the Norman invasion, was widely dispersed at the time of finding, and has never been the subject of satisfactory publication. Accordingly there would seem to be room for a brief note listing the new parcel before its own dispersal. All the coins are illustrated with the same numbering on Plate VII.

POINTED HELMET ISSUE

Brooke Type 6 = *B.M.C.* type VII = Hawkins 227
(*Michaelmas 1053–Michaelmas 1056?*)

MINT OF CANTERBURY

Moneyer Leofstan

1. *Obv.* +EDFE:•RDRE+ *Rev.* +LEOFSTANONCENT
Die-axis 0° Weight 16.9 grains
Cf. *B.M.C.* 72 but sceptre terminating in cross.

MINT OF HASTINGS

Moneyer Dunning


2. *Obv.* +EDFR•DRE• *Rev.* +DVINNCONH/EOTIE
Die-axis 90° Weight 20.9 grains
Cf. King¹ 108.
3. *Obv.* +EDPER•DREX *Rev.* +DVINNCONH/EOTIE
Die-axis 0° Weight 20.5 grains
Cf. King 110.

SOVEREIGN/EAGLES ISSUE

Brooke Type 7 = *B.M.C.* type IX = Hawkins 228
(*Michaelmas 1056–Michaelmas 1059?*)

MINT OF HASTINGS

Moneyer Brid

4. *Obv.* EADFARDREX  *Rev.* +BRIDOH/E:SDIH:
Die-axis 180° Weight 20.6 grains
Cf. King 116.

¹ H. H. King, 'The Coins of the Sussex Mints', *B.N.J.* xxviii (1955–7), pp. 60–74, 249–63, and 518–36.

HAMMER CROSS ISSUE

Brooke Type 8 = *B.M.C.* Type XI = Hawkins 222*(Michaelmas 1059–Michaelmas 1062?)*

MINT OF CANTERBURY

Moneyer Liofstan

5. *Obv.* +EADƿAR RDRE *Rev.* +LIOFƿTANONE/ENT:
 Die-axis 270° Weight 17.7 grains (cracked)
Cf. B.M.C. 89.

MINT OF CHICHESTER

Moneyer Godwine

6. *Obv.* +EADƿAR RDRE *Rev.* +GODƿINEOHƿICEIT
 Die-axis 0° Weight 19.9 grains
Cf. King 122.

MINT OF COLCHESTER

Moneyer Wulfwine

7. *Obv.* +EADƿAR RDRE *Rev.* +ƿVLƿFINEONCOLEC••
 Die-axis 270° Weight 15.4 grains
*Turner*¹ —. Vertical strokes in band of crown.

MINT OF CRICKLADE

Moneyer Liofred

8. *Obv.* +EADƿAR RDRE *Rev.* +LIOFREDONCRECEL
 Die-axis 90° Weight 21.2 grains
Cf. B.M.C. 156.

MINT OF DOVER

Moneyer Cilwi

9. *Obv.* +EADƿAR• RDRE *Rev.* +CILƿI:•ONDOƿCRE
 Die-axis 0° Weight 20.8 grains
Cf. B.M.C. 186.

MINT OF GLOUCESTER

Moneyer Ælfsi

10. *Obv.* +EADƿARD RDRE *Rev.* +ÆLFƿI:ONGLEƿEECT:
 Die-axis 270° Weight 20.3 grains
B.M.C. —.

MINT OF HASTINGS

Moneyer Brid

11. *Obv.* +EADƿAR RDRE *Rev.* +BRID:•ONH/ƿTI
 Die-axis 270° Weight 19.3 grains
Cf. King 121.

Moneyer Dunning

12. *Obv.* +EADƿAR RDRE *Rev.* +DVNINCONH/ƿTI
 Die-axis 180° Weight 20.7 grains
Cf. King 126. Sceptre ends in trefoil.

¹ T. M. Turner, 'Pennies of the Colchester Mint', *B.N.J.* xxiv (1941–4), pp. 8–21.

Moneyer Wulfric

13. *Obv.* +EADƿAR RDRE *Rev.* +ƿVLFRICONH/EƿTI
 Die-axis 180° Weight 20.5 grains
 Cf. King 129.

MINT OF LEWES

Moneyer Godwine

14. *Obv.* +EADƿAR RDRE *Rev.* +ƿODPINEONL/EPE..
 Die-axis 270° Weight 21.1 grains
 Cf. King 258.

Moneyer Oswold

15. *Obv.* +EADƿAR RDRE *Rev.* +OƿPOLD:ONL/EPE..
 Die-axis 270° Weight 20.2 grains
 Cf. King 262.

MINT OF LONDON

Moneyer Wulfgar

16. *Obv.* +EADƿAR RDRE *Rev.* +ƿVLƿƿARONLVND
 Die-axis 90° Weight 16.1 grains (cracked)
B.M.C. 1045 var. Vertical strokes in band of crown.
17. *Obv.* +EADƿARD RDRE *Rev.* +ƿVLƿƿARONLVNDE
 Die-axis 108° Weight 19.9 grains
 Cf. *B.M.C.* 1046. Vertical strokes in band of crown and trefoil sceptre.

MINT OF NORTHAMPTON

Moneyer Sæwine

18. *Obv.* +EADƿAR RDRE *Rev.* +ƿ/EPINEONHAMTV
 Die-axis 270° Weight 19.5 grains
 Cf. *B.M.C.* 529.

MINT OF NORWICH

Moneyer Ælfwine

19. *Obv.* +EADƿAR RDRE *Rev.* +/ELFPINEONNORÐ
 Die-axis 180° Weight 17.9 grains
 Cf. *B.M.C.* 1102.

MINT OF OXFORD

Moneyer Brihtred

20. *Obv.* +EADƿARD RDRE *Rev.* +BRIHTREDONOXENEX
 Die-axis 180° Weight 20.0 grains
 Cf. *B.M.C.* 1128.

MINT OF ROMNEY

Moneyer Wulfmær

21. *Obv.* +EADƿAR RDRE *Rev.* +ƿVLM/ERONRVMED
 Die-axis 0° Weight 17.6 grains (chipped)
 Cf. *B.M.C.* 1149. Pellet in second quarter.

MINT OF SHAFTESBURY

Moneyer Ælfwerd

22. *Obv.* +E•DƿAR RDRE *Rev.* +/ELƿP/ERDONƿC/ET•
 Die-axis 0° Weight 17.0 grains (chipped)
 Cf. *B.M.C.* 1121.

MINT OF THETFORD

Moneyer Blacere

23. *Obv.* +EDPARD RE: *Rev.* +BLACRAONDET
Die-axis 270° Weight 16.0 grains (cracked)
Cf. Carson¹ 96.

MINT OF WALLINGFORD

Moneyer Brand

24. *Obv.* +EADPAR RDRE *Rev.* +BRAD:ONPALINGE
Die-axis 0° Weight 19.5 grains
Cf. *B.M.C.* 1288.

MINT OF WILTON

Moneyer Ælfwold

25. *Obv.* +EADPA RDRE *Rev.* +ÆLFPOIDONPILTV
Die-axis 0° Weight 19.5 grains
Cf. *B.M.C.* 1350.

MINT OF WINCHESTER

Moneyer Anderboda

26. *Obv.* +EADPAR RDRE *Rev.* +ANDERBODEONFINE
Die-axis 0° Weight 20.0 grains
Cf. *B.M.C.* 1466.

Moneyer Godwine

27. *Obv.* +EADPAR RDRE *Rev.* +GODPINE:ONPINE
Die-axis 0° Weight 19.0 grains
Cf. *B.M.C.* 1470.

Moneyer Liofwold

28. *Obv.* +EADPAR RDRE *Rev.* +LIOFPOLDONPINCE^o
Die-axis 270° Weight 19.9 grains
Cf. *B.M.C.* 1477.

FACING SMALL CROSS ISSUE

Brooke Type 9 = *B.M.C.* type XIII = Hawkins 225

(*Michaelmas 1062–Michaelmas 1065?*)

MINT OF HASTINGS

Moneyer Colswegen

29. *Obv.* EADFARDRE+ANGL *Rev.* +COLSPEIENONHIES
Die-axis 0° Weight 16.2 grains
Cf. King 132 but *wedges* not pellets on inner circle on reverse.

Moneyer Dunninc

30. *Obv.* •EADFARDRE• *Rev.* +DVNNINCONHEST
Die-axis 270° Weight 13.8 grains (chipped)
Cf. King 136.

¹ R. A. G. Carson, 'The Mint of Thetford', *N.C.* 1949, pp. 189–236.

MINT OF NORWICH

Moneyer Godwine

31. *Obv.* •EADPARDREX•*Rev.* +GODPINEONOR

Die-axis 270° Weight 13.1 grains

Cf. *B.M.C.* 1108.

MINT OF ROMNEY

Moneyer Wulfmær

32. *Obv.* •EADPARDREX•N*Rev.* +FVLM/E•ONRVME

Die-axis 270° Fragmented

With these thirty-two pennies of uniform patination were two further Saxon coins which are of quite dissimilar appearance. One of these is a penny of Edward the Confessor of *B.M.C.* type III (Brooke 1 = Hawkins 220) by the Winchester moneyer 'Æstan' (Æthelstan). It appears to correspond exactly to a coin from the Dunbrody hoard (*Inventory* 141) which has before the bust a lance with cross-bar instead of the normal sceptre (Lindsay, *Heptarchy*, pl. 5, no. 134), but seems not to be the identical specimen. The probability must be that it is a die-duplicate from the same hoard. The second coin is a penny of Edward the Confessor of *B.M.C.* type XIII by the Lincoln moneyer Othgrim. It represents a trifling variety of *B.M.C.* 736 (normal crown, EADPARDRE+AN and LINC), and has been pierced twice by drilling, apparently to make a button. Also with these coins was a third intruder, a late thirteenth-century sterling of Namur struck for Guy of Flanders (Chautard, p. 5, no. 1).

Of the thirty-two pennies with which this note is more particularly concerned, no fewer than eight are from the mint of Hastings, and sixteen from mints in Sussex and Kent. The Steyning mint, however, is not represented, and this with the absence of *B.M.C.* type XV (Brooke 10 = Hawkins 223) must be decisive that the parcel is not from the great Chancton hoard of 1866 (*Inventory*, 81 and 345). The range of types is exactly that of the Sedlescombe find where Hastings coins were also present in quite disproportionate number, and the type most strongly represented in the parcel (*B.M.C.* type XI—24 coins) was totally absent from the find from Milton Street (*Inventory* 270). In the same way, the absence of coins of Harold II strongly militates against any connexion with the finds from Offham (*Inventory*, 297), Oving (*Inventory* —, but cf. *Num. Chron.* 1957, p. 198) and Denge Marsh (*Inventory* —, but cf. *Num. Chron.* 1957, p. 186) in which Sussex and Kent coins could be expected to be present in substantial quantity.

It is, too, a remarkable fact that every one of the thirty-two coins listed above finds a place in the *Inventory* listing of the Sedlescombe hoard—that is if we make the obvious correction 'Neiwine' > Godwine in the case of the second of the *B.M.C.* type XI coins of Winchester. The correction seems more plausible than Mr. Thompson's suggestion of Sæwine (op. cit., p. 122) if only because the spelling 'Seiwine' is unattested, while there is the further point that Sæwine is now firmly associated with Northampton, the newly published hoard from Harewood having furnished virtually irrefragable proof that the Southampton mint was closed throughout the reign of Edward the Confessor.¹

¹ R. H. M. Dolley, 'The Unpublished 1895 Find of Coins of Edward the Confessor from Harewood', *Yearbook of the British Association of Numismatic Societies*, 1961, pp. 17–26.

If, moreover, one examines closely the illustration of the coin in question (Pl. VII, 27), one can very well understand how Raper and Willett came to misread the still, at this period, quite exceptional cursive 'G' as 'N', while the following 'O' and 'D' are distorted by double-striking. No less remarkable is the circumstance that no fewer than ten of the coins in the parcel from the Co. Limerick correspond to coins represented in the Sedlescombe listing by single specimens (nos. 5, 7, 9, 10, 18, 19, 23, 25, 27, and 31), and the probability must be that we are dealing not simply with a parcel from the Sedlescombe find but with a parcel that had passed through the hands of Raper and Willett. In these circumstances the evidential value of the thirty-two coins illustrated is considerable, and it is hoped that the accompanying collotypes based on direct photographs will convey something of the superb condition of the majority of the Sedlescombe coins. It is clear that before concealment many of the coins had changed hands no more than once or twice, and where the pristine brightness of the individual pennies is at all marred it is by the most delicate of reddish stains, the product apparently of the decomposition of the iron-bound coffer in which the hoard would seem to have been buried.

This is apparently the first time that as many as twenty-four *B.M.C.* type XI coins from one hoard have been illustrated together on a single plate, and it is perhaps worth remarking some trifling varieties that do not appear to have been distinguished before. Of some potential importance because presumptively early are the coins where the band of the crown is broken up into compartments by a series of vertical strokes (e.g. nos. 7, 16, and 17). The *Fitzwilliam Sylloge* contains only three such coins (mints Cambridge, Hastings, and Hereford), and the *Hunter Sylloge* only two (mints London and Wilton). Such pieces should of course be distinguished from the even rarer coins where the band of the crown is 'jewelled' with pellets (cf. *B.M.C.* A/S ii, pl. xxv, no. 4). No example of this variety would appear to be in Cambridge or in Glasgow.¹ A third variety represented in the Sedlescombe parcel by two coins (nos. 12 and 17) substitutes a trefoil for the more normal quatrefoil at the head of the sceptre, a feature found in the case of two coins in the *Hunter Sylloge* (mints Exeter and Lincoln) and of die-duplicates in the *Fitzwilliam Sylloge* (mint Hastings—same die as no. 12). Not represented in the new parcel from Sedlescombe is the more obvious variety in the *Hunter Sylloge* (mint Canterbury) where the sceptre is of entirely different form being constituted of three pellets and two crescents on the model of coins of Harold I. In this paragraph, however, no attempt is made to draw up a systematic analysis of extant coins of the 'Hammer Cross' issue as such, and the purpose of these observations is simply to suggest points of departure for the serious student of the future.

¹ The present (January 1961) tally of coins of these two varieties in the British Museum is as follows:

(A) 'Compartmented band'

Bath, Osman, 1; *Canterbury*, Ælfred, 1; *Exeter*, Wicing, 1; *Hastings*, Brid, 1; *Hereford*, Ælric, 1, Leofenoth, 1; *Hertford*, Godwine, 1; *Wilgripri*, 1; *Ipswich*, Brunman, 1; *London*, Ælfward, 1, Ælfwine, 3, Godric, 1, Leofhinc, 1, Osmund, 1, Wulfgar, 3; *Thetford*, Blacera, 1; *Wilton*, Saewine, 1; *Winchester*, Leofwold, 2.

(B) 'Jewelled band'

Canterbury, Manna, 1; *Dover*, Godwine, 1; *Guildford*, Ælfric 2; *Hereford*, Ælfwi, 1; *London*, Dyrinc, 2; *Wilton*, Alfwoold, 1, Hærrad, 1; *Winchester*, Leofwold, 3.

COMPOSITION OF ENGLISH SILVER COINS (870-1300)

By J. S. FORBES, B.Sc., F.R.I.C., and D. B. DALLADAY

Introduction

ALTHOUGH a number of investigators have determined the composition of individual coins, as far as can be ascertained no comprehensive results of analysis covering a whole range of silver coins of the period 870 to 1300 have previously been published. It had been suggested that information in regard to the composition of the coins of this period might throw some interesting sidelights on the state of the coinage and coining methods. It was accordingly decided to obtain a representative selection of coins and to determine not only the silver content of each coin but also the percentages of the various alloying and impurity elements.

The analyses were carried out on twenty-nine broken silver pennies which were selected with some care to ensure that (a) the extent of any corrosion was reasonably small and (b) they had not been subjected to any cleaning process which might have altered their composition.

Method of Analysis

The coins were thoroughly scraped with a steel knife to remove as far as possible any surface contamination or corrosion products. Samples representing a cross-section of each coin were then taken for analysis.

(i) *Silver*

0.13 g. of sample were dissolved in dilute nitric acid and the solution filtered from any insoluble residue. The silver in solution was determined by potentiometric titration with sodium chloride. In most cases a small amount of silver was also present in the insoluble residue. This was presumably due to slight corrosion of the coins resulting in the formation of silver chloride. The silver in the residue was determined by cupellation with lead, due allowance being made for the gold in the sample, all of which was also present in the residue.

(ii) *Acid Insoluble Chloride*

It was assumed that the portion of the silver which was insoluble in nitric acid was present as silver chloride and the acid insoluble chloride content of the sample was calculated accordingly.

(iii) *Copper*

The solution which had been reserved from the potentiometric determination of silver was filtered and the copper in the filtrate determined by a spectrophotometric method using bis-cyclohexanone oxalyldihydrazone.

(iv) *Other Metallic Elements*

A large Hilger quartz spectrograph and ancillary apparatus were employed for the determination of other elements. In brief, the method consisted of the

total combustion of 0.005 gm. of the sample with 0.001 gm. of pure nickel powder using graphite electrodes and a constant current D.C. arc source, the nickel serving as an internal standard. Suitable portions of the spectrum were photographed and line densities converted to percentages of the various elements by standard spectrographic procedure. For the determination of nickel the same method was followed, except that ferric oxide was used as the internal standard.

The zinc contents of a number of the samples were also determined chemically and the results were in good agreement with those obtained spectrographically.

Results of Analysis

(i) *General*

The results are given in detail in Table I. In addition to the elements shown, very small traces of iron were present in most of the samples. Apart from acid insoluble chloride, non-metallic elements were not specifically determined and are reported by difference.

(ii) *Silver*

The values for silver content in Table I are not necessarily those of the newly minted coins. In order to arrive at the original silver contents two factors must be considered:

- (a) Corrosion of the coins since they were minted, resulting in the presence of non-metallic elements or radicals (e.g. chloride or carbonate).
- (b) The possibility of some enrichment in silver due to preferential corrosion and subsequent removal of base metal constituents, particularly copper. It is to be noted that the copper contents of many of the coins are lower than would be expected in a straight silver/copper alloy of the sterling standard.

In Table II, the silver contents of the coins have been recalculated as percentages of the metallic portions of the samples. This effectively corrects for (a) if it is assumed that the non-metallic elements are due entirely to corrosion and were not present in the newly minted coins. It is not possible to correct for (b) since the extent of the enrichment, if any, is not known. It is thought, however, that the silver contents of the newly minted coins may have been somewhat lower than the values in Table II.

The corrected silver contents are also shown graphically in Fig. 1.

(iii) *Copper and Zinc*

The values for copper and zinc have been similarly recalculated where necessary and are included in Table II.

Discussion

The authors prefer to leave any comments on the results to numismatists but would like to make the following observations as being of interest:

- (i) The silver content of the coins is variable prior to c. 1163. At certain

periods it is close to the sterling standard (e.g. *c.* 1060 to 1063) whereas at other periods it is well below (e.g. *c.* 1047).

- (ii) The silver content is consistently high after *c.* 1163. If due allowance is made for corrosion products, all the coins dated *c.* 1163 and later are up to the sterling standard.
- (iii) The lead content of the coins is fairly consistent, all values lying between 0.44 and 2.1 per cent. It is clear, therefore, that no attempt was made by the moneyers to debase any of the coins with large amounts of lead. The presence of a small amount of lead in the coins is to be expected since it was normally used in the process for recovering and refining silver.
- (iv) With only one exception, zinc is present in all the coins dated prior to *c.* 1163, the amount varying between 0.32 and 9.5 per cent. It is thought that the higher percentages must be the result of purposeful alloying additions, possibly in the form of brass.¹
- (v) Zinc is virtually absent in all the coins dated between *c.* 1163 and 1300.
- (vi) The fact that zinc is present in all the coins datable between 950 and 1136 suggests that a determination of zinc might provide a useful method of identifying comparatively recent forgeries of coins of this period, since it is only occasionally found in significant amounts in coins of a later period.²

A determination of the percentage of other metals such as gold and lead might also give an indication of the genuineness or otherwise of a particular coin.

Acknowledgements

The authors wish to thank Messrs. A. H. Baldwin & Sons Ltd. for supplying the coins used in this investigation. They are indebted also to Mr. R. H. M. Dolley, Department of Coins and Medals, British Museum, for helpful advice, including the dating and attribution of the coins.

The analyses were carried out at the Assay Office, Goldsmiths' Hall, London, E.C. 2, and publication is by permission of the Wardens of the Worshipful Company of Goldsmiths.

¹ Seven sceattas dated *c.* 695 to 730 (?) have also been analysed. These were found to be low in zinc, the highest containing only 0.05 per cent. The results on these coins must, however, be treated with reserve since they had been subjected to an electrolytic cleaning treatment which might have altered their composition. Coins dated prior to 950 obviously require further investigation.

² In the present investigation zinc was not found in excess of 0.02 per cent. in any of the coins dated between *c.* 1163 and 1300. Of 30 coins which have also been analysed with dates between *c.* 1510 and 1838, 5 had zinc contents greater than 0.1 per cent., the highest being 0.5 per cent.

TABLE I

*Results of Analysis**(Calculated as percentages of the total sample taken in each case)*

N.D. in the table signifies 'Not Detected' < Signifies 'less than'

Coin	Date	Mint	Per cent.											
			Ag	Cu	Zn	Au	Bi	Pb	Sb	Sn	As	Ni	Acid Insol. Cl.	Other non-metallic elements (by diff.)
1	c. 870	—	71.0	20.2	1.5	0.62	0.05	1.6	0.05	1.3	0.15	0.007	0.05	3.5
2	c. 920	—	93.5	3.9	N.D.	0.94	0.05	0.78	0.005	0.03	N.D.	—	0.05	0.7
3	c. 950	Chester Area	78.4	11.6	5.5	0.57	0.14	0.92	0.01	0.36	0.05	N.D.	—	2.4
4	c. 950	Chester Area	76.7	16.9	3.3	0.62	0.09	0.70	0.007	0.27	N.D.	0.004	—	1.4
5	c. 970	Chester	82.9	9.8	3.2	0.63	0.14	0.73	0.008	0.34	N.D.	N.D.	0.04	2.2
6	c. 985	London	88.9	3.0	0.55	0.18	0.07	1.4	0.007	0.06	N.D.	0.004	4.7	1.1
7	c. 1020	Southampton	87.5	5.4	3.0	0.37	0.04	1.4	0.007	0.66	0.03	N.D.	0.01	1.6
8	c. 1047	London	51.7	36.2	9.5	0.17	0.04	1.7	0.14	0.03	0.05	0.14	0.01	0.5
9	c. 1047	London	86.9	7.0	3.0	0.30	0.03	1.3	0.07	0.08	N.D.	N.D.	0.16	1.2
10	c. 1047	London	69.9	17.6	6.6	0.48	0.04	1.8	0.12	0.09	0.05	0.002	0.08	3.2
11	c. 1057	Dover	83.9	11.4	3.0	0.34	0.02	1.2	0.03	0.09	N.D.	0.004	0.11	—
12	c. 1060	Lewes	94.5	2.3	0.32	0.36	0.006	0.46	0.005	0.01	N.D.	N.D.	1.3	0.7
13	c. 1060	York	92.1	3.9	0.58	0.37	0.02	1.9	0.008	0.02	N.D.	N.D.	0.21	0.9
14	c. 1060	York	90.7	4.8	2.2	0.34	0.03	1.3	0.02	0.11	N.D.	N.D.	0.37	0.1
15	c. 1063	York	91.8	4.6	0.5	0.35	0.02	1.8	0.006	0.01	N.D.	N.D.	0.09	0.8
16	c. 1063	York	89.3	5.1	2.5	0.35	0.04	1.4	0.04	0.11	N.D.	N.D.	0.69	0.5
17	c. 1063	Wilton	94.2	3.4	0.58	0.41	0.01	0.78	0.007	0.01	N.D.	N.D.	0.04	0.6
18	c. 1133	London	85.5	5.2	4.7	0.57	0.07	1.8	0.12	0.16	N.D.	0.002	0.11	1.8
19	c. 1136	Canterbury	73.5	14.8	4.0	0.44	0.04	2.1	0.09	0.11	N.D.	< 0.001	0.14	4.8
20	c. 1163	Bury St. Edmunds	93.6	4.0	N.D.	0.46	0.04	1.1	0.008	N.D.	N.D.	N.D.	0.02	0.8
21	c. 1200	London	94.0	4.1	N.D.	0.22	0.03	0.62	0.01	N.D.	N.D.	< 0.001	0.11	0.9
22	c. 1205	Bury St. Edmunds	95.1	3.4	N.D.	0.20	0.06	0.63	0.005	0.01	N.D.	N.D.	0.16	0.4
23	c. 1225	London	81.7	3.3	N.D.	0.28	0.20	1.5	0.009	0.08	N.D.	< 0.001	6.2	6.7
24	c. 1225	Canterbury	93.5	4.9	N.D.	0.25	0.02	0.44	0.01	0.04	N.D.	0.004	0.09	0.7
25	c. 1251	London	93.5	3.7	N.D.	0.67	0.05	1.1	0.008	0.06	N.D.	N.D.	0.16	0.8
26	c. 1251	London	86.5	4.3	N.D.	0.08	0.48	0.90	0.12	< 0.002	N.D.	0.003	3.6	4.1
27	c. 1253	London	92.8	4.9	N.D.	0.29	0.09	1.2	0.005	0.004	N.D.	N.D.	0.04	0.7
28	c. 1283	London	92.6	3.9	< 0.02	0.27	0.12	0.86	0.01	0.06	N.D.	N.D.	0.93	1.2
29	c. 1300	London	91.4	5.8	N.D.	0.26	0.02	1.4	0.02	0.003	N.D.	0.004	0.22	0.9

TABLE II

Results for Silver, Copper and Zinc Contents
(Calculated as percentages of the metallic portion of the sample)

N.D. in the table signifies 'Not Detected' < Signifies 'less than'

<i>Coin</i>	<i>Date</i>	<i>Mint</i>	<i>Silver</i> %	<i>Copper</i> %	<i>Zinc</i> %
1	c. 870	—	73.6	20.9	1.6
2	c. 920	—	94.2	3.9	N.D.
3	c. 950	Chester Area	80.3	11.9	5.6
4	c. 950	Chester Area	77.8	17.0	3.3
5	c. 970	Chester	85.5	10.0	3.3
6	c. 985	London	94.4	3.2	0.58
7	c. 1020	Southampton	88.9	5.5	3.0
8	c. 1047	London	52.2	36.4	9.5
9	c. 1047	London	88.1	7.1	3.0
10	c. 1047	London	72.3	18.1	6.8
11	c. 1057	Dover	84.0	11.4	3.0
12	c. 1060	Lewes	96.4	2.3	0.32
13	c. 1060	York	93.2	3.9	0.58
14	c. 1060	York	91.2	4.8	2.2
15	c. 1063	York	92.7	4.6	0.50
16	c. 1063	York	90.4	5.1	2.5
17	c. 1063	Wilton	94.8	3.4	0.58
18	c. 1133	London	87.2	5.3	4.8
19	c. 1136	Canterbury	77.3	15.6	4.2
20	c. 1163	Bury St. Edmunds	94.4	4.0	N.D.
21	c. 1200	London	95.0	4.1	N.D.
22	c. 1205	Bury St. Edmunds	95.6	3.4	N.D.
23	c. 1225	London	93.8	3.8	N.D.
24	c. 1225	Canterbury	94.3	4.9	N.D.
25	c. 1251	London	94.4	3.7	N.D.
26	c. 1251	London	93.7	4.7	N.D.
27	c. 1253	London	93.5	4.9	N.D.
28	c. 1283	London	94.6	4.0	< 0.02
29	c. 1300	London	92.5	5.9	N.D.

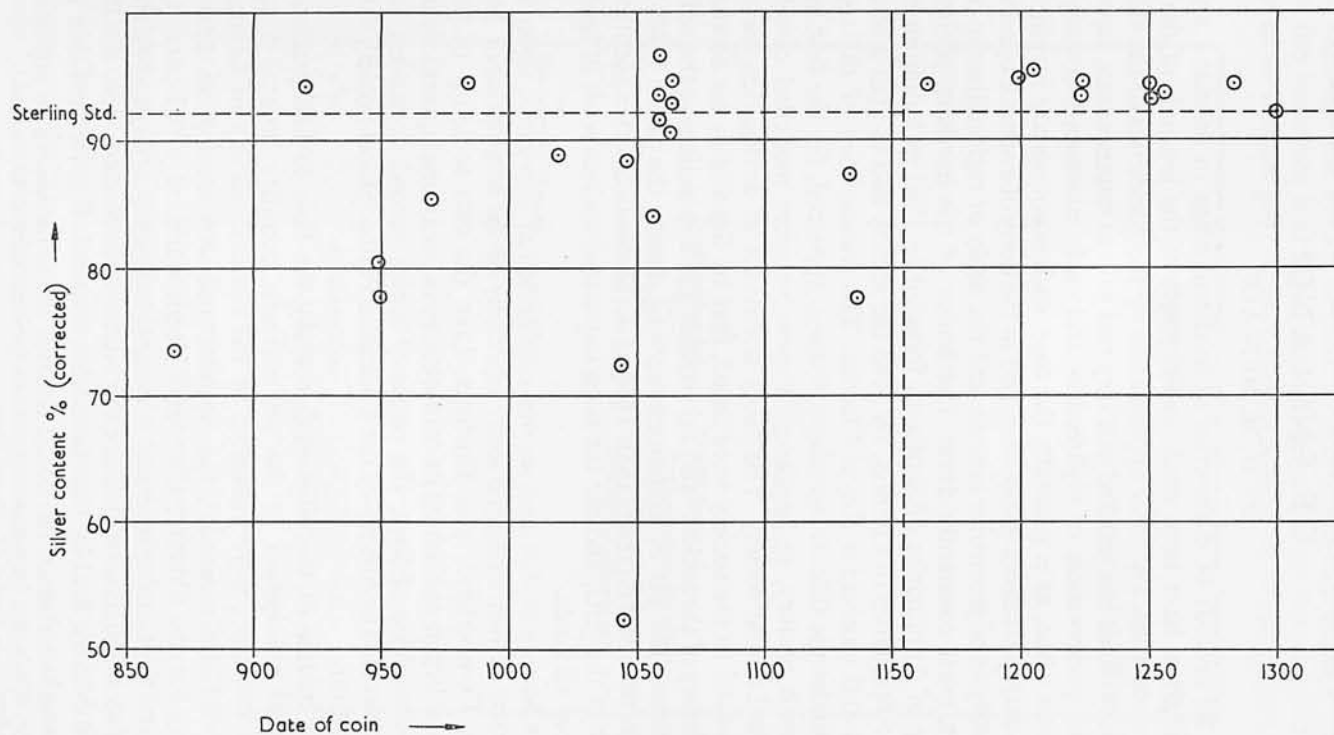


FIG. 1. Graphical illustration of silver contents in Table II

SOME FINDS OF MEDIEVAL COINS FROM SCOTLAND AND THE NORTH OF ENGLAND¹

By D. M. METCALF

MOST of the records of discoveries of medieval coins in Scotland and the north of England have been made in the pages of the journals of the local antiquarian societies. The clear appreciation by these societies of the value of recording local finds has resulted in a very real gain to numismatics, especially through the preservation of eighteenth- and early nineteenth-century find records. Even when, as is generally the case, such accounts are insufficiently detailed to satisfy students today, they add to the body of evidence upon which both the analysis of particular hoards, and the study of regionalism in monetary affairs, must constantly draw. The senior of the northern societies is the Society of Antiquaries of Scotland, founded in 1780 in imitation of the Society of Antiquaries of London. By 1783 the society had bought a house in Edinburgh and received a Royal Charter. The transactions of the society, published under the title *Archaeologia Scotica*, appeared, for the first half of the nineteenth century, in handsome quarto volumes modelled closely on those of the London society. The many donations of antiquities, including coins, presented to the society were listed, first by Smellie in his account of the early history of the society² and subsequently in appendixes in the volumes of transactions. The list of donations received during the years 1784–1830, for example, occupies no fewer than 118 pages. The notices often mention the provenance of the gifts, and the list is an important source-book in itself for antiquities of all kinds.

In 1813 a Society of Antiquaries was established at Newcastle upon Tyne, with the object of furthering the study especially of the antiquities of Northumberland, Cumberland, and Durham. Like the two societies of earlier foundation, it began publishing its transactions in occasional quarto volumes, entitled *Archaeologia Æliana*, the pages of which record donations to the society's museum. The history of the Yorkshire Philosophical Society follows the same pattern.

From the middle of the nineteenth century the flow of antiquarian and archaeological publication in the six northern counties became a spate. Journals of substance were published by the Historic Society of Lancashire and Cheshire (1848 onwards), the Architectural, Archaeological, and Historic Society for the County, City, and Neighbourhood of Chester³ (1849 onwards), and the Cumberland and Westmorland Antiquarian and Archaeological Society (1866 onwards). Since the Numismatic Society, now the Royal Numismatic Society, had by that time been founded, it is natural that there

¹ I am indebted to Mr. Blunt, Mr. Dolley, and Mrs. Martin for drawing my attention to a number of find-records, and for valuable suggestions for improvements to the text.

² See under Smellie in the list of abbreviations.

³ Cheshire is not, of course, one of the 'six northern counties', but Chester and its area, and the Wirral, belong in many ways to the north, and they have been included within the scope of this article.

should be fewer find-records of coins in their pages. There are, nevertheless, a few, and they include some that are important for the study of monetary circulation. All these societies and all their journals have continued to the present, although one or two of them have changed their names. The collections of the museums that have been associated with the societies must be counted as an integral part of the national collections of antiquities.

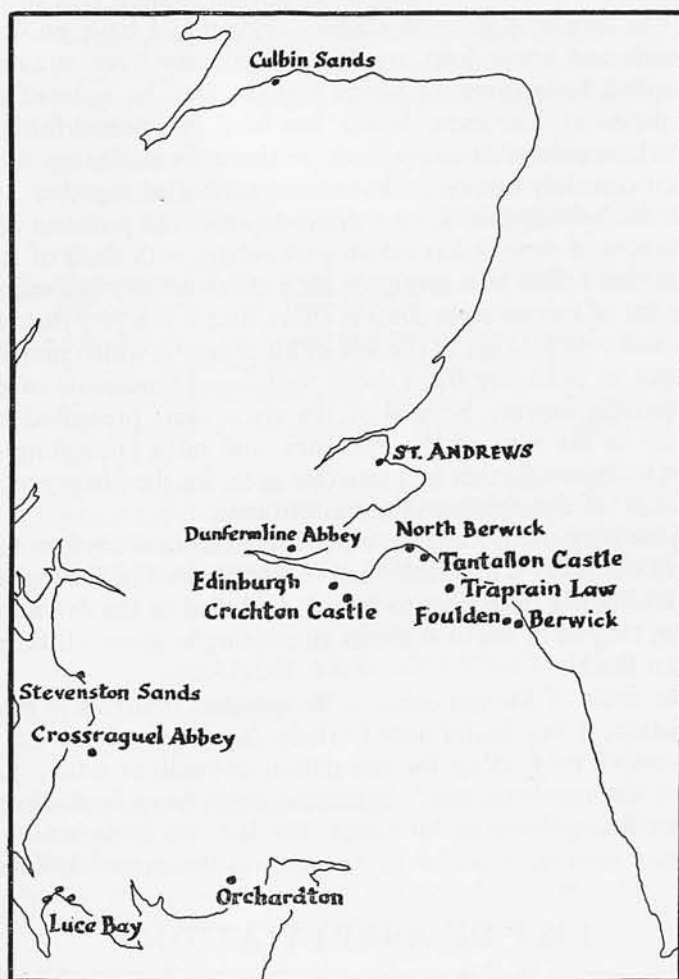


FIG. 1. Finds of the St. Andrews pennies of Bishop Kennedy (formerly identified as 'Crossraguel Pennies'), c. 1452-80. For the find-records, see the lists below.

The discussion of a particular kind of coinage at a society meeting occasionally led other members to report discoveries of similar coins. The best example is afforded by the considerable number of finds of the Scottish ecclesiastical issues of the late fifteenth century that were brought to light, first by Sir George Macdonald's publication of the Crossraguel Abbey deposit, and then again by Mr. R. B. K. Stevenson's reattribution of the type. There are enough records to give an idea of the wide circulation of this early example of petty coinage (see Fig. 1).

Some of the petty coins were beach-finds, a class of coin-finds represented also by the important series from Meols and by the South Shields finds. Each included groups of coins that evidently represented hoards. The probable explanation of these beach-finds lies in the marine erosion of certain sections of the coast.

The find-records gathered together in the following pages are a supplement to Mr. Thompson's *Inventory*. Their arrangement follows that of the *Inventory* and of the lists of eighteenth-century finds that I have published elsewhere.¹ Hoards and grave-finds are listed separately from stray finds and other unclassified finds (some of which may, in fact, be isolated specimens from larger deposits). The term 'hoard' has been interpreted fairly broadly, to include certain groups of coins, such as those from Grange and Ripon, which are not certainly known to have been concealed together but which, nevertheless, can be supposed to be a single deposit. The problem of deciding the circumstances of deposit has arisen particularly with finds of stycas. My impression is that a find of a group of such coins usually bespeaks a single deposit. The list of known styca finds is short, and it is a pity that the details of discovery and composition of the few small deposits, which may have been rather different in character from those containing thousands of coins, are not more precisely known. Several of the styca finds presented below are from localities to the west of the Pennines, and offer interesting evidence, which I hope to discuss further in a separate note, for the history of the north in the 'dark age' of the eighth and ninth centuries.

The sign § has been used, when the exact date of a discovery is not recorded, to indicate 'in the year —, or shortly before'. At the end of the register I have listed some additional references to hoards included in the *Inventory*, in the hope that they may be of use to students attempting to glean a little more here or there about them.

Among the finds of foreign coins, a Beneventan tremissis is perhaps the most remarkable; it was found near Carlisle. An Arabic dinar was found at Monymusk, which may reflect the circulation of twelfth-century gold in the coastlands of the northern seas.² Byzantine coins have been discovered at Leeds, Higher Broughton and Mortlach. The last two finds can be accepted only with some reserve. A denier of Rheims was discovered at Castle Eden.

LIST OF ABBREVIATIONS

NOTE: (1) I have searched through the volumes indicated for find-records. All those not already in the *Inventory* have been listed below. (2) Where a volume relates to one year or session but was published in the following year, the former date is given; e.g. *Y.P.S.* 1825 indicates the volume for the year 1825 (published 1826).

A.A. *Archaeologia Aeliana*: (from 1887, *Aeliana*), or *Miscellaneous Tracts, Relating to Antiquity*, 1822–1860. See also *P.S.A.N.*

A.S. *Archaeologia Scotica*, or, *Transactions of the Society of the Antiquaries of Scotland* (the second 'the' dropped from the title, from the fly-leaf of vol. ii onwards), 1792–1860. Continued from *Smellie*; then see *P.S.A.S.*

¹ Cf. *N.C.* 1957, 181 ff. and 1958, 73 ff.

² Cf. the important article recently published by J. Duplessy, 'La Circulation des Monnaies Arabes en Europe Occidentale du VIII^e au XIII^e siècle', *Revue Numismatique* 1956, 101–64, and cf. the York find of 1752, *N.C.* 1958, 95.

- C.N.W.* *Journal of the Architectural, Archaeological and Historic Society for the County, City and Neighbourhood of Chester* (from 1914–15, *Journal of the Chester and North Wales Archaeological and Historic Society*; from 1928, . . . *Architectural, Archaeological and Historic Society*), 1849–1956.
- H.A.S.* *Papers, Reports, etc. Read before the Halifax Antiquarian Society* (from 1930, *Transactions of the . . .*), 1902–10, 1918–19, 1922–58.
- H.S.L.C.* *Historic Society of Lancashire and Cheshire, Proceedings and Papers* (from 1854–5, *Transactions of the . . .*), 1848–9–1958.
- L.C.A.S.* *Transactions of the Lancashire and Cheshire Antiquarian Society*, 1883–1958.
- P.O.A.S.* *Proceedings of the Orkney Antiquarian Society*, 1922–3–1937–8–9.
- P.S.A.N.* *Proceedings of the Society of Antiquaries of Newcastle-upon-Tyne*, 1857–1956.
- P.S.A.S.* *Proceedings of the Society of Antiquaries of Scotland*, 1855–1956–7.
- Smellie W. Smellie, *Account of the Institution and Progress of the Society of Antiquaries of Scotland*, parts I and II, Edinburgh, 1782 and 1784. Then see *A.S.*
- T.A.A.S.D.N.* *Transactions of the Architectural and Archaeological Society of Durham and Northumberland*, 1869–1953.
- T.C.W.A.A.S.* *Transactions of the Cumberland and Westmoreland (from vi, Westmorland) Antiquarian and Archaeological Society*, 1866–1956.
- Y.A.J.* *The Yorkshire Archaeological Journal*, 1915–58. Continued from *Y.A.T.J.*
- Y.A.T.J.* *The Yorkshire Archaeological and Topographical Journal*, 1870–1912. Then see *Y.A.J.*
- Y.P.S.* *Annual Report of the Council of the Yorkshire Philosophical Society for MDCCCXXV (&c.)*, (from 1944, *Annual Report and Transactions of the Yorkshire . . .*; from 1955, *Annual Report of the Yorkshire . . .*). 1825–1959 except the volumes for 1826, 1856, 1870, and 1882.

I. HOARDS AND GRAVE-FINDS

ATTERPILE CASTLE, *see* Grange 1765.

1. BARNARD CASTLE MOOR, Durham

before 1794

Æ Scottish.

Deposit: after 1280

A penny of Alexander III's second issue, with 4 mullets of 6 points, was illustrated by Hutchinson as a specimen of a large quantity of silver pennies that had been found on Barnard Castle Moor.

W. Hutchinson, *The History and Antiquities of the County Palatine of Durham*, vol. iii, Carlisle, 1794, p. 234 n. and plate facing.

2. BEETHAM (Churchyard), Westmorland

1834

Find-spot: 54.13 N., 2.47 W.; SD 496796

Deposit: after 1066

Æ Anglo-Saxon and Norman.

Discovery: in digging a grave

A penny of Edward the Confessor, and two of William I, from the Beetham hoard were presented to the Society of Antiquaries by a Mr. Reveley.

Archaeologia 1852, 446; *P.S.A.* 1849–53, 166; *T.C.W.A.A.S.* 26, 30, 'the lower part of the town'.

3. BELFORD or district, Northumberland

§ 1860

Æ Scottish.

Deposit: after 1329

Three coins of David II, 'of different types', were probably specimens selected from a hoard.

P.S.A.S. 1860, 481.

BOLTON, *see* Urswick.

4. BOSSALL/FLAXTON, Yorkshire

1807

Find-spot: 54.2 N., 0.57 W.; SE 684704

Deposit: *c.* 927?

A reconstruction of this very important hoard is summarized in *N.N.A.* 1957-8, 24. *N.C.* 1869, 215 f. shows that both the principal types of St. Peter's pennies were present in the find. Three coins were donated to the Yorkshire Museum by W. H. Rudston Read in 1875.

Y.P.S. 1875, 25, and 1913, 15; *B.N.J.* 1955, 11 ff.; *N.C.* 1957, 127.

5 & 6. CAMPFIELD, Lancashire, nos. 1 and 2

1821, and before 1897

Find-spot: 53.30 N., 2.12 W.; SJ 8397

Deposit: early ninth century?

R Anglo-Saxon.

Discovery: in digging foundations

Uninscribed sceattas 'of the most frequent types', much worn by circulation, were found at Campfield (Manchester) while digging the foundations for the old reference library. Another record, of which the first may in fact be no more than a confused version, states that 'nine sceattas were found in digging the foundations for St. Matthew's Church (Campfield) in 1821'. It is quite possible, however, that there should be two sceat finds from the same locality.

L.C.A.S. 1897, 85, and 1885, 269.

CARTMEL, *see* Grange 1765 and 1892.

CASTLE HEAD, *see* Grange 1765.

CASTLERIGG, *see* Derwentwater.

CAWTHORNE, *see* 393, Yorkshire, under Addenda, below.

CLIFTON, *see* Swinton.

7. CLOSEBURN, Dumfriesshire (?)

§ 1829

5 *R* English and Scottish.

Deposit: after 1371

A Mr. F. Mentieth, Jr., of Closeburn, gave 6 coins to the Society of Antiquaries of Scotland, of which 5 may be supposed to have come from a local find. They were 'four of Edward I and II, of different mints' and a groat of Robert II. Cf. the discovery of a vase in Closeburn, 'in the garden of Wallacehall'.

A.S. 1831, App. 132; 1860, App. 2.

8. COCKBURNSPATH (St. Helens), Berwickshire

c. 1842

Find-spot: 55.56 N., 2.21 W.; NT 775710

Deposit: after 925

R Anglo-Saxon.

A considerable number of coins, including issues of Æthelstan, together with a rosary. *P.S.A.S.* 1950-1, 173 f.

9. CREGGAN, Argyllshire

§ January 1876

219 *R* and Æ Scottish.

Deposit: *c.* 1495-1500

James III, groat, Edinburgh, (1). James III and James IV, placks, several with numeral 4, (182). James IV, 'black farthings: *rev.* crowns and fleurs-de-lis' (billon pennies?), (36). *N.C.* 1876, 78 f.

10. CROSSRAGUEL ABBEY, Maybole, Ayrshire 1919

Find-spot: 55.20 N., 4.43 W.; NS 2708

Deposit: after 1488

177 billon, Æ and brass Scottish.

Discovery: archaeological excavation

The Crossraguel Abbey find, a most important deposit of petty coinage, is fully described in the article referred to. The attribution made there of certain of the coins as 'Crossraguel pennies' has subsequently been questioned.

P.S.A.S. 1919-20, 20 ff.; 1949-50, 109 ff.

11. DERWENTWATER (The Lady's Rake), Cumberland 1856-62

Find-spot: 54.35 N., 3.6 W.; NY 275213

Deposit: after 1280

34 Æ English.

The coins were listed as follows: Edward pennies, legends beginning with EDW: London 5, Bristol 2, Canterbury 1, Lincoln 1, York 1, Dublin 1; legends beginning with EDWA or EDWAR: London 11, Canterbury 7, Durham 3, Bury 1, Berwick 1. The find-spot is very exactly described.

T.C.W.A.A.S. 1903, 408; 1904, 273 f.; 1923, 255.

12. DUNKELD, Perthshire § 1860

Æ Scottish (3 listed).

Deposit: after 1249

Three coins of Alexander III, found in the course of street-works, doubtless represent a hoard.

P.S.A.S. 1860.

13. ECCLESFIELD, Yorkshire 1770

Many Æ English.

Deposit: after 1351

'A large number of groats and half-groats of Edward III to the quantity of a peck which sold for 60s. as its said.' The coins were found in a house. John Wilson, of Broomhead, Bradford, acquired one or two coins from the hoard. A peck of such coins might number 15,000; but the record may exaggerate.

Manuscript note by J. Wilson, preserved in Sheffield City Museum.

14. ESHA NESS (Churchyard), Shetland § 1949

Find-spot: 60.28 N., 1.37 W.; HU 2178

Deposit: after 1396

2 Æ Foreign.

Two sterlings of Eric of Pomerania may represent a deposit rather than stray losses.

P.S.A.S. 1945-50, 231.

15. GLENLUCE SANDS, Wigtownshire § 1934

Find-spot: 54.50 N., 4.48 W.; NX 1954

Deposit: after 1460

6 Æ Scottish.

Six 'black farthings' of James III found on Glenluce Sands must, in light of the composition of the Crossraguel Abbey hoard and of what is known about beach-finds from other places, be supposed to represent a single deposit rather than a number of stray losses.

P.S.A.S. 1934-5, 22.

16. GRANGE (Castle Head or Atterpile Castle; Penwortham), Lancashire 1765

Find-spot: 54.12 N., 2.53 W.; SD 421797

Deposit: mid-ninth century

5 Æ Anglo-Saxon (out of a total of 95?).

Stycas were found on an isolated round hill, the site of a hill-fort, while the hill was being 'improved' and planted and a house built for John Wilkinson, the ironmaster. Five, 'of different kings', were listed by Priestley, and Stockdale gives the reading of one

(of the five?) as: HAFDNE REX; MONNE. The historical significance of their deposit was seen only in connexion with the discovery of stycas at a second site, less than a mile away: for the suggestion that both groups were lost when the people of Cartmel fled for refuge from Viking raids, see W. G. Collingwood's note in *T.C.W.A.A.S.* 1924. Animal remains, rings of silver, iron, and brass, and beads of stone, lead, clay, and glass were also found.

J. Stockdale, *Annales Caermoelesens: or Annals of Cartmel*, 1872, 5 and 203; *H.S.L.C.* 1856, 76; E. Baines, *History of the County Palatine and Duchy of Lancaster* . . ., ed. J. Croston, 1888-93, v. 628, 642; *P.S.A.* 1891-3, 230; *L.C.A.S.* 1897, 84 f.; *T.C.W.A.A.S.* 1901, 316, and 1924, 290 f.; W. T. Watkin, *Roman Lancashire*, 215.

17. GRANGE (Merlewood Cave), Lancashire

1892

Find-spot: 54.12 N., 2.54 W.; SD 4079

Deposit: mid-ninth century

7 Æ Anglo-Saxon.

The excavation of a small cave in the face of a cliff immediately below Merlewood House yielded 7 stycas. The best description of the coins is given in the *Proceedings* of the Society of Antiquaries. They were as follows: +EDELRED REX, FORDRED; VIGMVND IPEP, COENRED; +EANRED REX, GADVTELS; +EDILRED RX, EARDVLF (retrograde letters and legend on both sides); +ERDED VEX, LEOFDEGN; uncertain; broken and uncertain. The deposit is to be dated by the coins of the late, blundered series. A coin that turned up recently with an uncertain pedigree is probably the same as the second listed above.

Proc. Soc. Antiq. 1891-3, 229 f.; *L.C.A.S.* 1892, 206 f. and 1897, 84 f.; *T.C.W.A.A.S.* 1893, 277, 1945-6, 295 and 1924, 290 f.; *V.C.H. Lancaster*, i. 259.

18. HARTLEPOOL, Durham

§ 1841

Æ English and Scottish.

Deposit: after 1283

In a letter, dated 29 September 1841, Sir C. Sharp writes to J. Bell of Gateshead: 'An immense quantity of coins have been found at Hartlepool—Edward I, Alexander, bishop Beck's pennies, etc. I have got two, but I don't know who has got the remainder.' This is a good example of a kind of find-record to which I have drawn attention elsewhere. Cf. Belford, Closeburn, &c.

P.S.A.N. 1909-10, 211; cf. *N.C.* 1957, 198.

HESLEYSIDE, *see* Shaw Moss.

19. HIGHLANDS OF SCOTLAND

December 1784

Æ Scottish (and English?).

Deposit: after 1437?

Lindsay records that in December 1784 more than a hundred groats and half-groats of James I and II were found in the highlands of Scotland, and were sold at 6s. an ounce. In 1790 a Dr. Farquharson donated, to the Society of Antiquaries of Scotland, *inter alia* 15 groats of James I and 1 Calais groat of Henry VI. There is every appearance of Farquharson's parcel being 6s. worth from the hoard, which may, therefore, have contained a few English coins in addition to the Scottish issues that Lindsay noted.

Lindsay, *S.* 262; *A.S.* 1831, App. 76.

20. HULL, Yorkshire

date?

Deposit: after 1309

Æ Foreign; 19 half-sterlings of John the Blind were found in Hull 'more than a century ago'.

Kitson Clark, *Gazetteer of Roman Remains in East Yorkshire*, 93.

21. JEDBURGH (the Castlehill), Roxburghshire

§ 1822

Find-spot: 55.28 N., 2.33 W.; NT 6520

Deposit: twelfth–thirteenth centuries

12 Æ English.

Out of 12 coins presented to the Society of Antiquaries of Scotland by Sir Walter Scott, Bart., 10 were 'silver pennies of Henry of England' and 2 were silver pennies of an unspecified ruler.

A.S. 1831, App. 101.

22. KEITH (near), Banffshire

autumn 1881

Find-spot: 57.32 N., 2.59 W.; NJ 4350

Deposit: after c. 1205

80 to 100 Æ English and Scottish.

The coins were found on the farm of Cauldhame, a few yards from the old cliff or bank of the Isla (and a little east of Douglas-brae old lime quarry). Out of 30 that were examined, the bulk were Short Cross pennies, while 2 were of William the Lion. Of these, one was signed HVE WALTER, and it was understood that there were other similar coins in the find. Coins presented to the Society of Antiquaries of Scotland included an English penny of Ipswich, IOHAN ON GIPE (Class V). The chronology of coins with the name of William is discussed in the reference cited.

P.S.A.S. 1881–2, 431 f., 433 ff.; cf. Stewart, p. 17.

23. KINCLAVEN CASTLE, Perthshire

Summer 1803

Find-spot: 56.32 N., 3.23 W.; NO 1538

Deposit: after c. 1280

Æ Scottish and English (4 listed).

Lindsay, in his work on Scottish coins, refers to a find at Kinclaven Castle and notes that the coins were described by Playfair in the *Scottish Magazine*. It would seem that he made a mistake over the handwriting of William Ferguson, who supplied him with many of the notices of finds that he included in his book (see his Preface, p. vi, and also the Lochar Moss hoard, below), since Playfair gives the find-spot as Kinclaven Castle. He mentions 4 coins, and gives enlarged illustrations, together with quite erroneous attributions, of 2 of them. These 2, an Edward penny of London, and a penny of Alexander III's second issue, with 4 mullets of 6 points, were found by R. Brodie in the ruins of the castle, while he was 'removing the lime rubbish, which had fallen from the castle, for the purpose of manure'. Playfair was shown a third, 'nearly illegible', coin, again of Alexander, and heard of a fourth coin that was taken to Perth, said to bear the name of Donald. No weight need be attached to this reading. Playfair's errors of attribution were pointed out in succeeding issues of the *Scots Magazine* by 'A Galloway Officer' and 'P. W.' of Glasgow. The Kinclaven Castle coins doubtless represent a hoard, which may have contained more pieces than those of which record has survived.

Lindsay, S. 265; J. Playfair, in *The Scots Magazine and Edinburgh Literary Miscellany* (January) 1804, 4 f. and plate; *ibid.* (February) 1804, 108 and (March) 1804, 168.

24. KINGHORNIE, no. 2, Kincardineshire

4 February 1902

494 Æ English and Scottish.

Deposit: after 1292

Discovery: in ploughing

An earthenware jug with a brownish glaze containing 469 Edward pennies, 9 of Alexander III, and 14 pennies and 2 halfpennies of John Baliol was found on the same farm as the Kinghornie hoard of 1893.

P.S.A.S. 1901–2, 633 and 668 ff.

25. KINGSCROSS POINT, Arran

§ 1909

Find-spot: 55.30 N., 5.6 W.; NS 0528

Deposit: mid-ninth century?

1 Æ Anglo-Saxon.

A styca of Archbishop Wigmund, moneyer Coenred, occurred as a grave-find.

P.S.A.S. 1908–9, 371–5, and 1950–1, 173 ff.

26. KIRKCOLM (Barnhill), Wigtownshire

January 1802

Find-spot: 54.58 N., 5.5 W.; NX 0368

Deposit: fourteenth–fifteenth centuries?

A uncertain.

Lindsay records that several gold coins, found in an old castle, were 'broader than a guinea, but so thin that one of them is not worth more than 9s. Some of them are almost smooth.'

Lindsay, *S.*, App. 50.

27. KIRCOWAN (Glassnock farm), Wigtownshire

§ 1836

Find-spot: 54.54 N., 4.36 W.

Deposit: after 1279

4 *Æ* English: Edward pennies.*A.S.* 1860, 33, 36.

28. LANCASTER (parish church)

November 1914

Find-spot: 54.4 N., 2.48 W.; SD 474619

Deposit: mid-ninth century

c. 20 *Æ* Anglo-Saxon.

In digging the vicarage garden, to the north side of the nave of Lancaster parish church, the remains were found of a wall running north. Close to the wall about 20 stycas were picked up.

H.S.L.C. 1914, 271.

29. LEITH, Edinburgh

c. 1850

Billon Scottish.

Deposit: late fifteenth century

'Several billon half-pence of James II, with crowns and fleurs-de-lis'; these are farthings probably of ecclesiastical issue from the second half of the fifteenth century.

Lindsay, *S.*, App. 52.LOBSTER HOUSE, *see* Bossall/Flaxton.

30. LOCHAR MOSS, Dumfriesshire

April 1765

A and *Æ* Scottish and English.Deposit: *c.* 1430

Lindsay records that at Locherness in April 1768 several gold and silver coins of the Jameses of Scotland and some of the Henries of England were found, enclosed in a cow's horn, and that Mr. Copland of Colliestown presented some of them to the Society of Antiquaries of Scotland. As in his account of the Kinclaven hoard (q.v.), Lindsay, or his printer, seems not to have been able to read Ferguson's writing: Smellie's list of donations gives the find-spot as 'Lochermoss', and the date of discovery as April 1765. The coins listed there are a gold demy (or half?) of James I or II, a Stirling groat of James I (*VILLA STREVEL*), and a half-groat and a penny of Henry V. The Stirling coin gives a date for the deposit after the beginning of the issue of the second variety of fleur-de-lis groats, therefore fairly late in the reign of James I, say, after *c.* 1430. The English coins, if correctly attributed, would suggest that the hoard was not, on the other hand, much later than that date.

Lindsay, *S.* 260; Smellie, ii. 53 f.MANCHESTER, *see* Campfield.

31. MEOLS, Cheshire, no. 1

1859 and earlier

5 *Æ* Anglo-Saxon.

Deposit: 1030 or later

Cnut, Helmet type, *LVNIEOF ON LEICE* (Gunleof, Chester?); Short Cross type, *ETSIGE ON SCRO*, *SVVILEMAN ON PIN*; 'halfpenny', no legends, small cross (2).

The probability that these coins were associated is discussed in the entry on the Meols finds below.

32. MEOLS, Cheshire, no. 2

before 1863

3 Æ Anglo-Saxon.

Deposit: mid-ninth century

Three Northumbrian stycas from the Meols finds almost certainly represent a hoard. The provenance is a valuable one for the study of the circulation of the stycas coinage. Cf. OTTERSPOOL, below.

The coins are noted and described in Thompson's *Inventory* under 'Dove Point'; there is no clear evidence of association with other antiquities.

33. MEOLS, Cheshire, no. 3

before 1863

5 R English.

Deposit: after 1399

Richard II, pennies (2); York halfpenny. Henry IV (or V?), York pennies (2).

Particular interest attaches to this small group of coins because it included an alleged York halfpenny (a coin not otherwise known), and because of the preponderance of York issues. May it have been a sum of money brought to Meols from the other side of the Pennines?

See the entry on the Meols finds for references.

34. MEOLS, Cheshire, no. 4

1863-5 and 1867

2 R Anglo-Saxon.

Deposit: eighth century

Two sceattas of the Debased Head/Standard type may have come from the same deposit, in spite of the fact that they were found separately and at an interval of two or three years. For illustrations of the coins, see *H.S.L.C.* 1867-8, 113-15.

35. MEOLS, Cheshire, no. 5

1869, 1873-4

5 R Norman, counting fragments.

c. 1078

William I, Bonnet type, fragment; 2 Sceptres type, 1 halved and 1 whole penny—the half a Chester coin, reading . . . N LIECE N . . .; Two Stars type, a halved penny.

In spite of the small number of coins in the deposit, it must be considered as being among the more important of Norman hoards, if only as evidence of the use of fractions of pennies. The date of concealment was perhaps early in the period of issue of the Two Stars type. A cut half, of the London mint, and a cut quarter, of a profile type, in the 'Potter-Meols' collection, may be from this deposit.

36. MEOLS, Cheshire, no. 6

before 1907

2 A English.

Deposit: after 1351

Two quarter-nobles of Edward III in the 'Potter-Meols' collection probably came from a single deposit. They were both London coins, of the series issued from 1351, and had a cross as initial mark.

37. NORTHUMBERLAND

May 1851

2 R English.

Deposit: after 1327?

Two silver coins of Edward III, reported to have been found 'with others', are apparently from an unknown hoard.

A.A. 1855, App. 15.

38. OTTERSPOOL, Lancashire

1863

Find-spot: 53.21 N., 2.54 W.; SJ 4084

Deposit: mid-ninth century (before 850?)

Base R and Æ Anglo-Saxon (?).

A hoard discovered by workmen during the construction of the Liverpool-Garston-Manchester railway line was concealed and presumably dispersed among the finders. The only available description of the coins stated that they were 'very small in size and with large letters for such a limited disc'. The recovery of stycas among the Meols finds (see

above) and of sceattas at Campfield encourages one to accept the obvious interpretation that the Otterspool hoard was also of Northumbrian coins. If so, the coastal provenances (the coins were found 'near the inner reach of this old creek') are suggestive of trade along the shores of the Irish Sea in the ninth century. Salt from Cheshire may have played a part in such a trade.

The hoard of stycas that Heywood published in *N.C.* 1888, and that he described as having been found c. 1867, may possibly have been a parcel from the Otterspool hoard. The occurrence of base silver stycas in Heywood's parcel offers some slight reason in support of the view, since the workmen might have thought silvery coins valuable. Heywood's residence at Manchester, taken together with the small number of styca hoards that are known, is perhaps a stronger argument. The composition of the Otterspool hoard must, however, remain conjectural on the evidence at present available.

H.S.L.C. 1865-6, 199; cf. *N.C.* 1888, 95.

39. PAISLEY, Renfrewshire

1782

Many base *R* and *Æ* Anglo-Saxon.

Deposit: mid-ninth century (c. 845?)

The Paisley hoard, for which Lindsay (*pace* Thompson) gives the date October 1782, was found probably not later than August of that year, for on 3 September Mr. A. Copland of Collieston (Aberdeenshire) gave to the Society of Antiquaries of Scotland '15 small silver Saxon coins' that belong to the hoard. Smellie noted the following legends: Edilred Rex, Eanred Rex, Hedulp Rex, Eahrud Rex, Elberht, Broder, Fordred, Coenred. He also noted that 3 of the coins of Edilred were inscribed Monne. Hedulp is presumably Redulf; the date of deposit cannot therefore be earlier than 844. The absence of Wigmund's name from the list is possibly of significance.

On 16 December 1783 Mr. Selkirk Stewart donated to the society 'ten Saxon coins in good preservation'. Smellie noted the legends Edilred, Eanred, and Coenred. The gift was doubtless a further small parcel from the Paisley hoard, as may have been 'three small ancient Saxon coins' presented by J. Jamieson of Forfar on 12 June 1784.

Smellie, ii. 64, 112, and 121.

40. PARTON, Kirkcudbrightshire

c. 1840

Find-spot: 55.2 N., 3.58 W.; NX 7576

Deposit: after 1279

R English, &c.

'About 70 years ago, a find of [Edward pennies, &c.] was made on the farm of Nether Corsock, about three-quarters of a mile from the Blackhills farm.' The coins were dispersed.

P.S.A.S. 1910-11, 571; cf. Thompson no. 45.

PENWORTHAM, *see* Grange 1765.

41. PERTH

July 1803

Find-spot: 56.23 N., 3.26 W.; NO 1123

Deposit: after 1488

R and Billon Scottish.

In pulling down an old wall in the castle gable, a bag was found containing Scottish silver and billon coins of James III and IV.

Lindsay, *S.* 265.

42. PERTHSHIRE

1822

R Scottish.

Deposit: after c. 1400

A large hoard from Perthshire consisted of groats and half-groats of Robert III, of the mints of Edinburgh, Perth, Aberdeen, and Dumbarton. 'It is said that 70 varieties of the groats occurred.'

Lindsay, *S.* 267.

RINCLAVEN CASTLE, *see* Kinclaven Castle.

43. RIPON, Yorkshire

§ 1846

Find-spot: 54.8 N., 1.31 W.; SE 317711

Deposit: mid-ninth century

Æ Anglo-Saxon.

Several styca of Æthelred and Eanred found near Ailsey Hill, the site of the discovery of a similar hoard of coins in 1695, apparently represent a second hoard. Cf. the record of 1849 of a styca found 'in a cottage at Ripon', under Thompson, no. 317. N. Heywood, writing in 1897, states that 'another find' [other than that of 1695] 'near the same tumulus, took place in 1853, consisting of specimens of Eanred and Æthelred'. May this not have been the § 1846 hoard, over the date of which Heywood had become confused? Since there are at least two finds from Ripon, however, it seems that the place was a centre of monetary affairs in the Northumbrian kingdom, and there is therefore nothing improbable in three separate styca hoards.

Archaeol. J. 1846, 73; *L.C.A.S.* 1897, 83.

44. ST. ANDREWS (Kirkhill), Fifeshire

1860

Find-spot: 56.21 N., 2.48 W.; NO 5016

Deposit: late fifteenth century

4 Æ Scottish.

It seems likely, even though they came from the mint-place of the issue, that 4 pennies of the ecclesiastical coinage of James III were a single deposit.

P.S.A.S. 1919-20, 35, 37.

45. SALTCOATS, Ayrshire

§ 1781

Find-spot: 55.38 N., 4.47 W.; NS 2441

Deposit: after 1279

3 Æ English.

In 1781 Mr. Alexander M'Taggart of Saltcoats donated to the Society of Antiquaries of Scotland 3 Edward pennies that had been found buried 10 feet from Mr. Cunningham's Canal and 20 feet from the Stevenson Burn. It is likely that there was a larger number of coins in the deposit.

Smellie, i. 57.

46. SATLEY (churchyard), Durham

c. 1874

Find-spot: 54.37 N., 1.49 W.; NZ 1143

Deposit: after 871; c. 871-5?

6 or more Anglo-Saxon.

'In digging a grave on the south side of the church of St. Cuthbert the sexton turned up at least 6 coins . . . the then vicar claimed them and either sold or lost them.' The account attributes coins to Egbert (827-36) and Alfred (871-901). It is tempting to see this small hoard, like that from near-by Gainford, as belonging to a group of deposits concealed early in Alfred's reign in face of the 'heathen host'.

P.S.A.N. 1939-42, 273; the group of deposits is recognized by R. A. Smith, 'The Beeston Tor Hoard', *Antiq. J.* 1925, 135 ff.

47. SHAW MOSS (near Hesleyside), Northumberland

§ 1865

Find-spot: 55.9 N., 2.17 W.; NY 8283

Deposit: after 1292

262 Æ English, Scottish, and Foreign.

A hoard of Edward pennies, Scottish coins of Alexander III (10) and John Baliol (1), and foreign sterlings (3) is described.

A.A. 1865, 238 ff.

48. SOUTH SHIELDS, Durham, no. 1

c. 1880, &c.

Find-spot: 55.0 N., 1.25 W.; NZ 3667

Deposit: c. 1375

Æ Scottish and English (29 listed).

Most, but perhaps not quite all, of the coins listed are from a single deposit. The circumstances in which they were found are discussed below in the list of stray finds.

1. David II, groat, Edinburgh, +DAVID*DEI*GRA*REX*SCOTTORVM* (in the original find-record, the printer's sign ‡ is used to represent either two crosses or two stars, throughout the list). *Rev.* +DNS*PTECTOR MS*Z*LIBATOR MS; sceptre on *obv.* joins a point of the tressure. (Blair 1.)
2. —, —, —, but without † at end of legend, and with two stars where no. 1 has one in the legend; the sceptre is longer and touches the tressure. (B 2.)
- 3–5. —, —, —, similar to no. 2, but the head is larger and does not touch the tressure as in no. 2. (B 5–7.)
6. —, —, star at base of sceptre. *Obv.* inscription ends with two stars of five points; the head is farther back than on nos. 1–2, and the back lis of the crown juts through the tressure to the outer rim. (B 3.)
7. —, —, —, nothing at end of inscription on *obv.*; *rev.* inscription has two stars of five points after DNS. The crown is much larger than on no. 1. (B 4.)
8. —, penny, *rev.* REX SCOTTORVM, 4 mullets of 6 points. (B 8.) *Note:* Nos. 6 and 7 are coins of the third issue. Nos. 1–5 are perhaps of the second issue.
9. Robert II, groat, Edinburgh, +ROBERTVS*DEI*GRA*REX SCOTTORVM; *rev.* has star and crescent after DNS. The sceptre ends in a star; it does not reach the tressure either above or below. (B 1.)
10. —, —, —, as no 9. (B 9.)
11. —, —, —, as no. 9, but type larger. (B 2.)
12. —, —, —, as no. 9, but rougher. (B 5.)
13. —, —, —, as no. 9, but star at bottom of sceptre lower down. (B 6.)
14. —, —, —, as no. 9, but reads SCOTTSRVM. (B 17.)
15. —, —, similar to no. 9, but single stars after DEI and GRA. (B 3.)
16. —, —, similar, but +ROBERTVS*DEI*GRA*REX*SCOTTORV; large head, sceptre comes down to point of tressure, and the star is on a level with it. (B 4.)
17. —, —, *obv.* stops are single stars after DEI, GRA, and REX only. (B 7.)
18. —, —, similar (?), but mis-struck; half the obverse has been struck with the reverse. (B 16.)
19. —, —, *obv.* stops, single star between words. (B 8.)
- 20–23. —, Perth, *obv.* as no. 9. (B 10–13.)
24. —, —, —, but no star after ROBERTVS; rougher type. (B 14.)
25. —, —, —, two stars after each word, including SCOTTORVM; head much finer. (B 15.)
26. —, half-groat, Perth, +ROBERTVS+DEI GRA+REX+SCOTTOR. (B 18.)
27. —, —, —, as no. 26, but two crosses after MEVS. *Obv.* double-struck. (B 19.)
28. Edward III, groat, London (1351–61), EDWARD D G REX ANGL Z FRANC D HYB; annulet stops on both sides. (B, not numbered.)
29. —, half-groat, London, EDWARDVS REX ANGL DNS HYB; small crosses between words. (B, not numbered.)

The date of deposit of the hoard may be set at c. 1375.

49. SOUTH SHIELDS, Durham, no. 2

1911

Æ English.

Deposit: after c. 1223

The Short Cross pennies found on the beach at South Shields in 1911, as noted in the list of stray finds, probably represent a deposit. One coins read WILLEM ON CANT (Class VII, VIII, after 1223).

50. SWINTON, Lancashire

June 1947

Find-spot: 53.31 N., 2.21 W.; SD 7701

Deposit: after c. 1223

72 \mathcal{R} English, Scottish, Irish, and Foreign.A Short Cross hoard, published in *N.C.* 1947, where 66 coins are described.*L.C.A.S.* 1947, 224, 231; *N.C.* 1947, 80 ff.

51. URSWICK, Lancashire

c. 1800

More than 30 \mathcal{R} English.

Deposit: after 1327?

Discovery: in ploughing

A hoard of small coins of Edward III (Edward pennies?), found in ploughing, was dispersed.

Close, *Furness*, p. 395; *T.C.W.A.A.S.* 1926, 49.

52. WHITBURN, Linlithgowshire

17 October 1921

Find-spot: 55.52 N., 3.39 W.; NS 9464 (field no. 1135 on OS) Deposit: after 1488

248 *N*, \mathcal{R} and Billon Scottish and English.

Discovery: in ploughing

A hoard terminating with groats of James IV, and including a rare Edinburgh half-groat of James III, is fully described in the reference cited. It was found on Cowhills farm.

P.S.A.S. 1921-2, 321 ff.

53. WHITBY, Yorkshire

date?

 \mathcal{A} Anglo-Saxon.

Deposit: mid-ninth century

A styca hoard including 2 Constantinian coins is recorded from Whitby.

Kitson Clark, *Gazetteer of Roman Remains in East Yorkshire*, 138.

54. WIGTOWNSHIRE

§ January 1838

Deposit: after c. 1280

 \mathcal{R} English and Scottish; 3 Edward pennies and 1 of Alexander III.*A.S.* 1860, 35.

55. YORK, City Jail (near Baile Hill)

1802

Find-spot: 53.57 N., 1.5 W.; SE 602512

Deposit: after 1066

c. 100 \mathcal{R} English, of William I.*Y.P.S.* 1913, 97.

56. YORK (?)

§ 1827

Deposit: mid-ninth century

In 1827 the Rev. W. V. Vernon presented a styca of Æthelred II to the Yorkshire Museum, and in 1828 another. He may have had them from a hoard. None is recorded in the years immediately before 1827, and these two coins may therefore represent an unknown find; cf., however, the stray find (?) at York, Micklegate, § 1827.

Y.P.S. 1827, 62; 1828, 49.

57. YORK, Minster

1829

Find-spot: SE 603522

Deposit: thirteenth century?

76 \mathcal{R} English, Long Cross coins were found in the crypt during excavations. Disposition: Yorkshire Museum. Certain coins donated to the Museum by the Rev. W. V. Harcourt in 1832, and said to have been found 'in the choir and nave of the old crypt', are probably from the same deposit.

Y.P.S. 1913, 18, and 1831, 32.

58. YORK

§ 1840

Deposit: eighth–ninth century

An important hoard of 30 silver sceattas and a gold coin of Carinus (283–5) was found during excavations for the railway. The sceattas were presented to the Yorkshire Museum by the Rev. C. Wellbeloved.

Mr. Wilmot has kindly given me the following description of the coin of Carinus: aureus, *obv.* M. AVR. CARINVS NOB CAES., head to r. cuirassed; *rev.* VICTORIA AVG, victory, without wings, holding sceptre and trophy, on globe. (Cf. *R.I.C.* v/2, p. 161, no. 190, Siscia).

Y.P.S. 1840, 26.

59. YORK (*dubiae fidei*)

§ March 1846

3 *N* and 1 *R* Anglo-Saxon.

Three specimens are known of a remarkable Anglo-Saxon gold coinage of the seventh century, tentatively attributed to York, showing a stylized facing bust, supposed to be ultimately of Byzantine derivation, on the obverse, and a degenerate legend on the reverse. All three are from the same pair of dies.¹ All three are recorded to have been found at York. Their pedigrees are clear: the specimen now in the Yorkshire Museum was said to have been found on 20 November 1849 and was in the collection of Robert B. Cook.² The second was in the collection of Thomas Bateman, and has passed, by way of the Grantley and Lockett collections, to the Ashmolean Museum.³ The third was presented to the British Museum in 1850, by a Dr. Hemingway of Dewsbury.⁴ *Prima facie*, the facts that the three coins are die-duplicates of a very unusual type, and that they came to light within a short period of time, suggest that either, as Sutherland noted, they came from a single discovery,⁵ or they are false. There is in fact a statement that the Cook and Bateman coins were found together.⁶ Since, however, the Bateman coin was known already in March 1846, and since Cook is known to have collected for Bateman,⁷ there is evidently, and at the least, some confusion and uncertainty in the matter.

The accounts near to the event in time are as follows: on 25 March 1846, Mr. Bateman, jr., exhibited at a meeting of the British Archaeological Association casts of the second coin mentioned above and of a sceat of Br. Class 13. The coins were stated to have been found at York; it was not said specifically that they had been found together.⁸ At a meeting of the Numismatic Society on the following day, 26 March 1846, Roach Smith exhibited (the same?) casts of the two coins and repeated the information of Mr. Bateman, while expressing some reserve about the gold coin.⁹ On 18 April 1850 Robert Cook exhibited his specimen of the gold coin before the Society of Antiquaries, with the information that it had been found at York *in the preceding November*.¹⁰

When the Cook collection passed into the Yorkshire Museum, a note of the accession was published, in which it was stated that the gold coin had been found in 1848 and that the Bateman specimen had been found with it.¹¹ This information seems not to have been published before that time: it may have been contained in papers belonging with the collection.

The crux of the problem is that if Cook's coin was in fact found with Bateman's (as it almost certainly must have been if it is genuine), Cook's statement in April 1850 means either that he was misled by someone who had had the coin until at least the end of November 1849, that is, for at least three and a half years after its supposed date of discovery, or else that he himself was deliberately giving a false account of it.

¹ C. H. V. Sutherland, *Anglo-Saxon Gold Coinage*, 1948, pp. 50 and 94; nos. 75a, b, and c, noted in the same order in the text here.

² *Y.P.S.* 1913, 65.

³ Bateman Sale 1893, lot 240; Grantley Sale 1943, lot 597; Lockett Sale 1955, lot 205.

⁴ Mr. Dolley has kindly informed me that a note in the register, in the same handwriting as the entry, states that the coin was 'found at York'.

⁵ *Op. cit.*, p. 51.

⁶ *Y.P.S.* 1920, xv–xvi, giving the date of discovery as 1848!

⁷ *Y.P.S.* 1913, 98.

⁸ *Journal of the British Archaeological Association*, 1846, 189 f., and see also p. 57 of the same volume.

⁹ *N.C.* 1845–6, Proceedings, p. 10.

¹⁰ *Proceedings of the Society of Antiquaries*, 1849–53, 68.

¹¹ *Y.P.S.* 1920, xv.

The obverse of the 'York' type was already known in the eighteenth century. It was illustrated by C. Hall in 1774,¹ and by J. Strutt, in his *Chronicle of England*, in 1778,² with the reverse type +EADBALD·R·CA around a cross. The reader must judge the probability of this legend for himself, bearing in mind that the coin from which the illustration was prepared is apparently not now known. If the 'York' coins could be shown beyond doubt to be genuine and to have been found in the middle of the nineteenth century, then they would do much to authenticate the 'Eadbald' type, but there would at the same time be almost insuperable difficulties in attributing the gold to York, and its find-spot would be surprising. A date before the death of Eadbald c. 640 also raises problems of the Byzantine prototype to which the gold could be traced back, since the loros had not at that time appeared on the imperial coinage in its characteristic form. While both types are uncertain, however, one is entitled to be suspicious of the reading R·CA and to wonder whether the single piece is not a forgery inspired by the historical interest of the king under whom Kent was led back to the Christian faith. If it is, then one may be virtually certain that the gold coinage is false also, the only alternative being that it was discovered before 1774. It may just be worth drawing attention to the 'five gold Anglo-Saxon coins' that were sold at the time of the Clarkson sale.³

Proof does not seem to be within reach at present; but I think that the onus of proof is on those who claim that the coins are genuine.

60. YORK

1879

Find-spot: SE 600523

Deposit: mid-ninth century

c. 400 Æ Anglo-Saxon.

A hoard of about 400 stycas was found during excavations in preparation for the Fine Art and Industrial Exhibition. They were in good condition but were said to include no new types. Disposition: the Yorkshire Museum.

Y.P.S. 1879, 12.

61. YORK, Clifford Street

1884/5

Find-spot: SE 604515

Deposit: mid-ninth century

2 Æ Anglo-Saxon, with a cross.

On the site of the Public Library there was found a leaden cross 2 inches long, perforated for suspension, and impressed on its front with both faces of a styca of Osberht. The stycas were of Eanred and Æthelred II.

V.C.H. York, ii (1912), 103; Y.P.S. 1913, 38.

62. YORK

§ 1938

N English (2 listed).

Deposit: c. 1470

Two small gold coins that found their way to the Yorkshire Museum in 1938 and 1939 respectively are close enough to each other in date of issue to suggest an undisclosed hoard from the period of the Wars of the Roses. They were a quarter-noble of Henry VI and a quarter-ryal of Edward IV. The latter coin is a rarity.

See York under Stray Finds below.

63. UNKNOWN SITE

§ 1783

55 Æ English and Scottish.

Deposit: after 1306

In April 1783 Mr. Alexander Gardner, a jeweller, donated to the Society of Antiquaries of Scotland 55 coins which, very clearly, had been selected from a hoard containing a much larger number. There were 5 coins of Alexander III including three varieties, 1 of Robert Bruce, and 49 Edward pennies. The latter had been chosen with a classification according to the obverse legend in mind, that is, they were primarily grouped into those reading EDW, EDWA, EDWAR, and EDWARD, and in each group 2 specimens from

¹ C. Hall's plates, referred to by Sutherland, op. cit.

² Pl. xvii, 2.

³ Y.P.S. 1920, xv.

each mint were selected. Where there is only one coin of a variety, it may be because only one was found in the hoard. The 49 coins are here tabulated to emphasize the distribution among mints rather than the obverse readings:

	EDW	EDWA	EDWAR	EDWARD	Total
<i>London</i>					
2+4+1 (forgery?)		2		2	11
<i>Canterbury</i>					
CANTOR 2		CANTOR 2	CANTOR 2	CANTOR 2	8
<i>York</i>					
EBORACI 2					2
<i>Durham</i>					
DVREME 2		DVREME 2	DVREME 1	DVREME 2	10
„ double		DVNELME 2			
quatrefoil i.m. 1					
<i>Bury</i>					
ROBERTVS 2		VILL SCI EDMVNDI 2			4
<i>Bristol</i>					
VILL BRISTOLIE 1		VILL BRISTOLIE 1			4
VILLA BRISTOLLIE 2					
<i>Chester</i>					
CESTRIE 2					2
<i>Lincoln</i>					
LINCOL 2					2
<i>Berwick</i>					
VILLA BEREWICI 1		VILLA BEREVECI 2			3
<i>Dublin</i>					
DVBLINIE 2					2
<i>Waterford</i>					
WATERFOR 1					<u>1</u>
					<u>49</u>

The coin of Bruce dates the hoard after 1306, and the pennies, of Class 10, reading EDWARD, struck c. 1302, confirm it.

Smellie, ii. 87 ff.

64. UNKNOWN SITE (?)

§ 1838

'A hundred copper coins chiefly of James II' presented to the Society of Antiquaries of Scotland almost certainly represent a deposit.

A.S. 1860, 35.

65. UNKNOWN SITE

§ 1846

Deposit: thirteenth century?

D. Balfour of Trenabie presented 22 silver coins to the Society of Antiquaries of Scotland in 1846. Since 17 of them were of William the Lion (7) and Henry III (Short Cross?) (10), one suspects that they came from a hoard from the first half of the thirteenth century. The remaining 5 coins were: 3 Edward pennies, 1 of Alexander III, and 1 of Robert Bruce.

A.S. 1860, 53.

66. UNKNOWN SITE

before 1925

39 R English and Scottish.

Deposit: thirteenth–fourteenth centuries

In 1925 Mr. A. Hurst donated to the Yorkshire Philosophical Society '39 English and Scottish silver coins from the mints of Perth, Edinburgh, York, Durham, Canterbury and London'. The description suggests a parcel from a hoard, probably of the thirteenth or fourteenth century.

Y.P.S. 1925, 31.

II. STRAY FINDS AND UNCLASSIFIED FINDS

67. ALSTON (Hartside Cross), Cumberland

1929

Find-spot: 54.49 N., 2.26 W.; NY 6545

1 R Scottish, Alexander III.

T.C.W.A.A.S. 1930, 128 and 211.

68. APPLEBY, Westmorland

before 1606

Find-spot: 54.35 N., 2.29 W.; NY 6820

1 R Anglo-Saxon.

When the grammar school at Appleby, built in 1606, was pulled down to be replaced by a new building, there was recovered a small group of coins that had been sealed into the wall by the Master at the beginning of the seventeenth century. They were 'an Irish sixpence of James I, a coin of the Confessor, and four Roman denarii of base metal silvered over'. The medieval and ancient coins were doubtless finds, perhaps local finds. Although no further information is available, they are of interest because they are an early instance of antiquarianism in the north of England.

Proc. Soc. Antiq. 1889–91, 23.AUCHLISHIE, *see* Kirriemuir.

69. BAMBURGH CASTLE, Northumberland

§ 1894

Find-spot: 55.36 N., 1.42 W.; NU 1834

1 Æ Anglo-Saxon, Eanred, Monne. Find-spot and stratification very exactly described. 'Believed to be the first styca found there.' Found in the course of archaeological excavations.

P.S.A.N. 1893–4, 227 and 1903–4, 204.

70. BANNOCKBURN FIELD

§ 1859

Find-spot: 56.5 N., 3.55 W.

1 R Scottish, groat of Robert III, Perth.

P.S.A.S. 1859, 429.

71. BARNBY DUN (Church)

§ 1862

Find-spot: 53.34 N., 1.4 W.; SE 6109

4 R English and Scottish.

Four small coins were found in the church. There is no reason to suppose that they were associated. They were a penny of Edward II, a farthing of Edward III, a halfpenny of Henry IV, and a farthing of Robert Bruce. The last is a very rare coin. Its loss is therefore not likely to have been a long time after its issue.

N.C. 1862, *Proc.*, p. 7.

72. BERWICK

about 1879

2 Æ Scottish.

Two copper coins of the ecclesiastical coinage of James III were found on the line of the Edwardian wall.

P.S.A.S. 1919–20, 33 f. and 37.

73. BIRKENHEAD (Priory), Cheshire

1869

Find-spot: 53.23 N., 3.1 W.; SJ 3288

1 Æ Irish, Edward penny, Dublin, EDW.RE.ANGL. DNS.HYB., CIVITAS DVBLINE. In the grounds of the Priory.

H.S.L.C. 1870–1, 139.

74. BISHOP AUCKLAND (near), Durham

§ 1893

1 Æ English, Long Cross penny, mis-struck: 'two limbs of the cross on the reverse being beneath the head on the obverse, and the bottom part of the face is on the reverse.'

P.S.A.N. 1893–4, 13 f.

75. BLACKROD (Castle Croft), Lancashire

1952

Find-spot: 53.36 N., 2.36 W.; SD 618107

1 Æ Burgundian, blanc, Charles the Bold.

1 Æ English, groat, Edward IV.

The find-spot and the coins are very exactly described, and the date (1471–) and circumstances of loss are discussed. The two coins were very probably associated.

L.C.A.S. 1952–3, 202 f. and 205 f.

BORVE, *see* Galson.

76. BOSSALL (Vicarage Garden), Yorkshire

February 1929

Find-spot: 54.2 N., 0.54 W.; SE 718607

1 Æ English, farthing of Edward I (1280) (Class I?).

Y.P.S. 1935, 41.

77. BURGHEAD, Morayshire

(?) 1861; § 1863

(i) 1 Æ Anglo-Saxon, penny of Alfred, (D)vine, twice pierced. Described.

P.S.A.S. 1863, 377 f., and 1950–1, 173 f.

(ii) 1 Æ Scottish, groat of James I, Edinburgh, 'common type'.

P.S.A.S. 1863, 378.

78. BURTON-IN-LONSDALE (Castle Hill), Yorkshire

1904

Find-spot: 54.9 N., 2.32 W.; SD 649721

2 Æ English, Cross-and-crosslets ('Henry II's first coinage'). Found in excavations.

T.C.W.A.A.S. 1905, 284.

79. BUSTON CRANNOG, Ayrshire

1880

1 Anglo-Saxon, plated *A* over Æ thrymsa.

P.S.A.S. 1950–1, 173 f. and references cited there.

80. CARHAM, Northumberland

before 1901

1 *A* and 4 Æ English; the following 5 coins, all carefully described, were among a number 'mostly found near Carham'.

Henry III penny; Edward III, London groat, ANGL Z FRANC, annulet at end of

legend; Edward IV, London groat, mm. cross, *rev.* small cross between words; Henry VI, quarter-noble, mm. lis on both sides; Henry VI, Calais groat, Br. I var., annulet issue, mm. pierced cross on both sides, annulet after POSVI.

P.S.A.N. 1901-2, 154.

81. CARLISLE (near)

about 1872

1 *Æ* Beneventan tremissis, of Arichis II (758-787), struck after 774, *B.M.C.* 11-12, 'said to have been found near Carlisle twenty years ago'. Cf. the remark on the sceat listed in the following entry.

P.S.A.N. 1891-2, 185.

82. CARLISLE (near)

before *c.* 1900

1 *Æ* Anglo-Saxon. An uninscribed sceat, *obv.* a full face with 4 pellets each side; *rev.* animal left with head turned right, and a curved line between legs (cf. Brooke, Class 30), 15.2 gr., was found near Carlisle. It was stated, in the Carlyon-Britton sale catalogue, to have been in the Major Creeke and Batty collections, and to have been found 'many years' previously. The interest in the coin's pedigree lies in the possibility that it was found in a deposit along with the Beneventan coin, noted above.

Carlyon-Britton Sale 1913, lot 175 (illustrated, pl. vi); apparently both the Creeke and Batty collections were sold privately; *Y.P.S.* 1913, 65 and 74; Lockett sale 1955, 312.

CASTLE CROFT, *see* Blackrod.

83. CASTLE EDEN (Church), Durham

1895

Find-spot: 54.45 N., 1.20 W.; NZ 428385

1 *Æ* Denier of Henry, Archbishop of Rheims; two-line inscription HENRICVS; *rev.* 2 fleurs-de-lis and 2 pellets in angles of cross. The division of coins of this general type between Henry I (1162-75) and Henry II (1227-40) is not altogether certain, but the type HENRICVS indicates that this coin is probably of Henry II. Note that the reverse type has pellets in place of the more usual crescents. The coin was found while altering the church.

P.S.A.N. 1895-6, 239; Poey d'Avant 6070, 6080; Blanchet-Dieudonné, vol. iv, pp. 142-4.

84. CHESTER, Love Street

§ 1939

Find-spot: 53.12 N., 2.54 W.; SJ 409663

1 *Æ* English, Edward I penny, Canterbury.

C.N.W. 1939, 107.

85. COLDINGHAM (Churchyard), Berwickshire

§ 1905

Find-spot: 55.53 N., 2.9 W.; NT 9065

1 *Æ* Anglo-Saxon, styca of Archbishop Eanbald, Eodwulf.

Described and illustrated. Found in grave-digging.

P.S.A.N. 1905-6, 103.

86. CORBRIDGE (Church), Northumberland

before 1865

Find-spot: 54.58 N., 2.1 W.; NY 9964

1 *Æ* Anglo-Saxon; the penny of 'Beornred of Mercia', which was in the possession of a Mr. Fairless of Hexham, would seem to have been either a mis-read or possibly an altered coin of Burgred.

A.A. 1865, 233 f.; *P.S.A.N.* 1901-2, 347.

87. CORSTOPITUM (site of), Northumberland § 1936
 2 *Æ* English, Edward pennies, described as Edward II, Durham, mm. lion (Bishop Beaumont), and Edward III, York archiepiscopal.
P.S.A.N. 1935-7, 168.

88. CRICHTON CASTLE, Pathhead, Midlothian § 1940
 Find-spot: 55.33 N., 2.58 W.
 1 *Æ* Scottish, James III ecclesiastical coinage.
P.S.A.S. 1939-40, 147.

CROSLANDS PARK, *see* Furness Abbey.

89. CROSSRAGUEL ABBEY, Maybole, Ayrshire 1919
 Find-spot: 55.20 N., 4.43 W.; NS 2708
 3 *Æ* and 1 Bil. English and Scottish: 2 Edward pennies, 1 groat, James I of Scotland, 1 Bil. penny of James II.
P.S.A.S. 1919-20, 20 ff.

90. CULBIN SANDHILLS, Elgin § 1863; § 1920
 (i) 2 *Æ* (fragments) Scottish, James III ecclesiastical coinage.
P.S.A.S. 1863, 377.
 (ii) 8 *Æ* Scottish, James III ecclesiastical coinage. Found at various times.
P.S.A.S. 1919-20, 35.

91. CULLERCOATS (Clock House), Northumberland July 1893
 Find-spot: 55.2 N., 1.26 W.; NZ 3571
 1 *Æ* English, penny of Edward IV, Durham, Bishop Booth, 12 gr.
P.S.A.N. 1893-4, 78.

92. DENTON, Gainsford (Church), Durham § 1891
 Find-spot: 54.34 N., 1.40 W.; NZ 219189
 1 *Æ* English. Henry VI, Calais half-groat, Br. I var., annulet issue, mm. cross both sides (?), *rev.* annulets in VIL and CAL quarters. HENRIC×DI×GRA×REX×ANGL×Z×F; POSVI×DEVM×ADIVTORE×MEVM, VILLA×CALIS. 28 gr. Found in clearing the ground, in putting up a new church building.
P.S.A.N. 1891-2, 5, 19.

93. DONALD'S ISLE, Loch Doon, Ayrshire 1933-6
 Find-spot: 55.15 N., 4.23 W.; NX 4997
 1 *Æ* English, Edward penny, London. Found 2 miles north of the castle, in 'monks' graves'.
P.S.A.S. 1936-7, 327.

94. DUN BEAG, Struan, Skye 1914-20
 Find-spot: 57.22 N., 6.25 W., NG 3438
 2 *Æ* English: penny of Henry II; Edward penny, Canterbury. Found in the course of excavations.
P.S.A.S. 1920-1, 127.

95. DUNFERMLINE ABBEY, Fifeshire § 1846, § 1939
 Find-spot: 56.3 N., 3.28 W.; NT 0987
 1 *Æ* Scottish, a groat of Robert II. Found within the burial-ground.
A.S. 1860, 54.

3 Æ various; 1 Æ James III ecclesiastical coinage; 2 French jettons. Found 'in the west corner of the Frater sub-croft'.

P.S.A.S. 1938-9, 334.

96. EDINBURGH (Holyroodhouse)

January 1917; § 1939

Find-spot: 55.57 N., 3.11 W.; NT 269738

2 Æ Scottish, James III ecclesiastical coinage. The second was found in the palace gardens.

P.S.A.S. 1919-20, 35, and 1938-9, 334.

97. FORGUE, Aberdeenshire

§ 1949

1 Æ Scottish, sterling of Robert Bruce.

P.S.A.S. 1949-50, 231.

98. FOULDEN, Berwickshire

§ 1920

1 Æ Scottish, James III ecclesiastical coinage.

P.S.A.S. 1919-20, 35 and 37.

99. FRESWICK, Caithness

1937-8

1 Æ English, penny of Henry III, WILLEM ON LVND (Class Vc-g), along with sherds attributed to the same date as the coin. Found in excavation of a Viking settlement.

P.S.A.S. 1938-9, 86, 102.

100. FURNESS ABBEY, Lancashire

1880; December 1904

Find-spot: 54.8 N., 3.13 W.; SD 2271

2 Æ English, quarter-nobles of Edward III, one found at Croslands Park.

T.C.W.A.A.S. 1905, 303.

GAINFORD, *see* Denton.

101. GALSON, Borge, Isle of Lewis

§ 1922

1 Æ Anglo-Saxon, penny of Eadgar. Found in excavations in a kitchen-midden.

P.S.A.S. 1922-3, 12 and 1923-4, 19 and 202.

102. GLASS (Churchyard), Aberdeenshire

§ 1893

1 Æ Scottish, demy of James I, *obv.*, Burns 481; *rev.*, Burns 437c.

P.S.A.S. 1892-3, 72.

103. GLENLUCE SANDS, Wigtownshire

§ 1926

Find-spot: 54.50 N., 4.48 W.; NX 1954

1 Æ Scottish, James III ecclesiastical coinage.

P.S.A.S. 1925-6, 97.

See also Luce Bay.

104. GORTEN BAY, Kentra, Ardnamurchan, Argyllshire

§ 1924

1 Æ English, Edward penny, London. (Historical evidence adduced suggesting loss in 1297.)

P.S.A.S. 1924-5, 106, 108.

HARTSIDE CROSS, *see* Alston.

105. HAWICK (the Mote), Roxburghshire 1912
Find-spot: 55.25 N., 2.46 W.; NT 5014
1 R English.

A 'short-cross penny of Henry II's first issue' was discovered, along with fragments of medieval pottery, at the bottom of the ditch surrounding the Mote, in the course of excavations.

P.S.A.S. 1913-14, 23.

106. HEDDON-ON-THE-WALL, Northumberland 1958
1 R English, an Edward penny of Durham, 1305-7.
A.A. 1959, 350.

107. HIGHER BROUGHTON, Lancashire before 1884
1 Byzantine (?).

Mr. G. C. Yates exhibited 'Roman coins of Honorius and Anastasius'. May these coins (if reliance can be placed on the record) have been gold?

L.C.A.S. 1884, 146.

108. HORNSEA, Yorkshire April 1875
1 R Anglo-Saxon, styca of Æthelræd I, EDIΓHED; *rev.* horned animal right with arched tail; arabesque.
L.C.A.S. 1897, 87; *Y.P.S.* 1913, 34; Coll. F. W. U. Robinson, Grantley.

HOYLAKE, *see* Meols.

109. HULL (near), Yorkshire § 1751
1 A Anglo-Saxon.

'October 11, 1751. Mr. Vertue showed me a drawing of a gold Saxon coyn of Sithric lately found near Hull; a great curiosity.' The reading is doubtful.

W. Stukeley, *The Family Memoirs of the Rev. William Stukeley* . . . (Surtees Soc. lxxx (1885), 364).

IRVINE, *see* Stevenston Sands.

110. JEDBURGH (near), Roxburghshire 1859
1 Æ Anglo-Saxon, styca of Osberht, Monne. Illustrated and described in detail.
P.S.A.S. 1860, 300.

111. KELSO (near: St. James's Green), Roxburghshire October 1788
Find-spot: 55.36 N., 2.26 W.; NT 7333
1 R Scottish, Robert II. Found near 2 stone coffins with skeletons, in the foundations of some religious houses.
Lindsay, *S.*, App. 2, p. 50; *P.S.A.S.* 1921-2, 185.

KENTRA, *see* Gortan Bay.

112. KIRKMAIDEN (St. Medan's Chapel), Wigtownshire c. 1825
Find-spot: 54.41 N., 4.55 W.; NX 3640
2 R Scottish, one of David and one of Alexander, allegedly found in the old chapel.
P.S.A.S. 1885-6, 76 ff.

113. KIRRIEMUIR (Auchlishie), Forfarshire § 1860

1 R Scottish, penny of John Baliol.

P.S.A.S. 1860, 246.

LAURISTON (site of), *see* Selkirk.

114. LEEDS, near (Osmundthorpe Hall), Yorkshire 1774

Find-spot: 53.48 N., 1.34 W.; SE 3034

1 N Byzantine, a coin of Justinian I.

V.C.H. County of York, vol. ii, p. 101.

115. LIVERPOOL (Islington), Lancashire c. 1863

Find-spot: SJ 3591

1 R English, Edward penny of Dublin.

H.S.L.C. 1866-7, 178.

LOCH DOON, *see* Donald's Isle.

116. LUCE BAY (Glenluce Sands, Stoneykirk Sands), Wigtownshire § 1920

12 Æ Scottish, James III ecclesiastical coinage. Found at various times.

P.S.A.S. 1919-20, 35.

MAYBOLE, *see* Crossraguel Abbey.

117. MEDOMSLEY (near), Durham § 1837

1 R English, a groat of Edward IV, London, was found near Medomsley (Lanchester).

A.A. 1844, App., 5.

118. MELROSE ABBEY, Roxburghshire § 1939; § 1940

2 Æ; 1 N, various. (i) Æ, James III ecclesiastical coinage. (ii) Nuremberg counter. (iii) N demi-lion of Robert III, heavy issue.

P.S.A.S. 1938-9, 334; 1939-40, 151.

119. MEOLS, Cheshire c. 1810 onwards

Find-spot: 53.24 N., 3.11 W.; SJ 2189

The records of the Meols finds are not only a minor classic in the numismatic archaeology of the Middle Ages, but are of some importance for the monetary history of England in the eleventh to fourteenth centuries. Marine erosion on the coast-line of the Wirral peninsula, in Cheshire, destroyed in the course of the nineteenth century the site, it would seem, of a medieval settlement. Antiquities were discovered on the shore by an old man from the village of Hoylake, and some of them found their way to the parsonage. Independently, a fisherman had made an extensive collection of finds, which he sold to a Liverpool merchant. In the course of relatively few years, after the discoveries became known, thousands of antiquities, among them hundreds of coins, were picked up on the shore by collectors whose enthusiasm was aroused by success and whose interest was made easy, if they lived in Liverpool, by the proximity of the site. Competition, and even, on occasion, warm feelings, grew among them. The finds attracted the scholarly attention of two men in particular: Abraham Hume wrote a systematic account of the discoveries,¹ and Henry Eckroyd Smith for ten years after its publication reported annually to the Historic Society

¹ A. Hume, *The Antiquities found at Hoylake, in Cheshire*, 1847. Pp. 28, 4 Plates and folding map. A. Hume, *Ancient Meols, or, Some Account of the Antiquities found near Dove Point, on the Sea-Coast of Cheshire . . .*, 1863; the chapter 'Coins', pp. 286 ff., is by H. E. Smith; see also pp. 47-51.

of Lancashire and Cheshire¹ on subsequent finds. The Grosvenor Museum, Chester, acquired a considerable number of coins from the site, that had formed the 'Potter-Meols' collection.² It is not clear how many of those coins are ones that had already been described by Hume or Smith; probably many, but not all, of the coins in the 'Potter-Meols' collection are further discoveries. I have thought it best, nevertheless, to keep them separate from the totals of the earlier finds, in the table below.

	<i>R Sceattas</i>	<i>Æ Stycas</i>	<i>Other Anglo-Saxon</i>	<i>Norman, &c.</i>	<i>'Henry II', &c.</i>	<i>'Henry III', &c.</i>	<i>Edwardian</i>	<i>Later</i>	<i>Totals</i>
c. 1828-63	..	3	9 ^a	1 ^b	16 ^c	72 ^d	70 ^e	12 ^f	183
1864	..	..	..	..	1	1	..	..	1
1863-5	1	..	..	..	1	1 ^g	1 ^h	..	4
1866	..	..	..	..	..	..	1 ⁱ	..	1
1867	1	..	2 ^j	..	11 ^k	12 ^l	14 ^m	2	42
1868	..	..	..	..	3 ⁿ	6 ^o	5 ^p	..	14
					12 ^s	9	18 ^t		
1869	..	..	1 ^q	3	+11 ^r			1	55
1870	..	..	..	..	x ^u	x	x	1 ^v	x+1
1871	..	..	1 ^w	..	8 ^x	6 ^y	14 ^z	..	29
1872	..	..	1 ^{aa}	..	5 ^{bb}	2 ^{cc}	5 ^{dd}	1 ^{ee}	14
1873	..	..	..	1	..	3 ^{ff}	..	..	4
1874	..	..	2 ^{gg}	1	1	4 ^{hh}	2	..	10
1875	..	..	..	..	..	..	1	..	1
Totals	2	3	16	6	57+x	116+x	131+x	17	359+x
'Potter-Meols' collection	..	..	8 ⁱⁱ	4 ^{jj}	10 ^{kk}	+11 59 ^{ll}	64 ^{mm}	16 ⁿⁿ	171
					+10 ^{oo}				

^a Apart from the five coins of Cnut listed among the hoards, there were the following coins: Eadgar, *B.M.C.* type V? EÆFER (Eofermund?); Æthelræd II, Hand Type, +ÆÐESTAN M^o O CANT [illustrated]; —, Crux Type, RIC MO LV; Edward Confessor, PACX Type, ON LVN.

^b William I, PAXS.

^c Including 2 coins of John, of Dublin and Limerick; perhaps associated?

^d The distribution among mints was: London 26, Canterbury 7, Berwick 1, Bristol 1, Durham 1, Hereford 1, Dublin 3, Uncertain 32. See note (e).

^e The distribution among mints was: London 30, Canterbury 14, Chester 4, Durham 3, York 1, Berwick 1, Bristol 1, Dublin 1, Waterford 2, Uncertain 16; halfpennies 3, farthings 2; pollards 2. These and the coins under (d) included more cut halves than whole pieces, together with numerous cut quarters.

^f Including a groat of Edward III, 5 coins of Richard II and Henry IV or V listed as a hoard, and a counterfeit, in base metal, with no legends.

^g Cut half.

^h Bristol mint.

ⁱ London mint.

^j Cnut, Quatrefoil Type, London, Egilr(ic); Edward Confessor, weight 7 gr. +ELFFINE ON SV. Illustrated in *H.S.L.C.* The latter coin and the sceat found in the same year are presumably the 2 coins noted in *Proc. Num. Soc.*, 19 December 1867.

^k Note 1 coin of Ipswich; London 4, Bristol 1; 3 cut halves, 2 cut quarters.

^l London 7, Durham 1, Winchester 1, Canterbury 1, Irish 1, Uncertain 1; they included several cut halves.

^m London 4 and 2 and halfpennies, Canterbury 2, Durham 1, Dublin 2, Uncertain 2; Edward III, penny of York and farthing of London; 1 Scottish.

¹ Smith's annual reports will be found in *H.S.L.C.* 1858-9, 257; 1859-60, 221, 232; 1860-1, 329; 1861-2, 182; 1863-4, 240; 1865-6, 215 f.; 1866-7, 185; 1867-8, 113 ff.; 1868-9, 206; 1869-70, 276; 1870-1, 128; 1871-2, 144 f.; 1872-3, 127 ff.; 1873-4, 95 f.; 1874-5, 96 ff.; 1875-6, 182; 1878-9, 68 f.

² *C.N.W.* 1907-8, 5 ff.

- ⁿ London 1, uncertain 2.
^o London 2, Bristol 1, Gloucester 1, uncertain 2.
^p London 1, Lincoln 1, cut half and cut quarter both of London, farthing.
^q Edward Confessor, Sovereign/Eagles Type.
^r Cut quarters of pennies and halfpennies.
^s Including 1 of Bury.
^t Including 3 Irish halfpennies and 3 farthings, two of which are of London; and 1 sterling of Porcien.
^u Including a short-cross coin of Lincoln, TONIAS ON NICO (Tomas?—Class V).
^v Dublin groat, mm. rose.
^w Edward Confessor, cut half, *B.M.C.* type III, OS] ON LEI.
^x Including 2 cut halves and 2 cut quarters.
^y Including 4 cut halves and 1 cut quarter.
^z Including 1 cut half, 1 cut quarter, 2 halfpennies, 1 halfpenny cut in half, 2 farthings; 1 sterling of Hainault.
^{aa} Cnut, Short Cross Type, LEOFINE ON LECIE.
^{bb} Including 1 Scottish coin of William the Lion, LE REI WIL, WIEH (third coinage, without mint-name, Hue Walter?); also 3 halves.
^{cc} A Lincoln coin with numerals, and a coin reading IHG WAL.
^{dd} Including 2 cut halves.
^{ee} York penny of Edward IV.
^{ff} Cut halves, one Irish.
^{gg} Æthelræd II, Hand Type, fragment; Harthacnut, cut half, Arm and Sceptre Type, OD ON LEI.
^{hh} Including 1 cut half (with numerals) and 1 cut quarter.
ⁱⁱ Edgar (1) (cf. *a*); Æthelræd II, Hand Type (1), 'common type' (Crux?), York (1); Cnut, 'profile', Chester or Leicester (1), 'three-quarters bust', London (1); Edward Confessor, 'profile', Chester (1); Sovereign/Eagles type, Chester (1) (cf. *q*?); Hiberno-Danish (1).
^{jj} William I, cut half, London, and cut quarter, profile type (cf. Meols no. 5 hoard); Henry I, cut half, London, and a penny, of a profile type.
^{kk} Henry II, 'first issue', Ipswich (2) (cf. *k*—only 1 coin of Ipswich recorded, 1828–75), uncertain mint (1); 'second issue', London, Canterbury, &c. (5); William the Lion, cut halves (2).
^{ll} Long Cross, London, Canterbury, Oxford, Rhuddlan, &c., including one with REX TERCI (10); cut halves, mostly Long Cross, of London, Lincoln, Winchester, Dublin, &c. (46); John, cut quarter, Dublin (1); Alexander II, Edinburgh pennies (2).
^{mm} Edward pennies (described as Edward I) of London, Canterbury, Bristol, Lincoln, York, and Bury (25); halves, London, Dublin, Waterford, &c. (9); farthings, London, Lincoln, Dublin (6); 'Edward II', pennies of London, Canterbury, and Bishop Beaumont of Durham (15); Alexander III, pennies (4); John Baliol (1); foreign sterling (4).
ⁿⁿ Edward III, quarter nobles, 1351 issue, mm. cross, London (2) (see under Meols no. 6 hoard); half-groat, same description (1); pennies of London, York, Durham (2 of Bishop Hatfield) (9); halfpence, London (2); Richard II, penny, York (cf. Meols no. 3 hoard); Robert III, halfpenny, Perth (1).
^{oo} Cut quarters, Short or Long Cross.

Most of the coins would seem to have been found singly, but there is evidence that some of them were associated in their deposit. The clearest, and perhaps the most interesting, group are the coins of William I found in 1869. They illustrate the value of a year-by-year record of the discoveries, for if such information were not available one could not feel any confidence that the Norman coins originated in a single deposit. In all, 6 coins of William I are recorded from Meols, of which three were cut halves and 1 a fragment. A coin of the PAXS type was found at some date before 1863, a halved penny in 1873 and another in 1874. The 3 remaining pieces came to light in a single year. Two of them, a penny and a halved penny, were of the Two Sceptres type, while a fragment of another coin was of the earlier Bonnet type. As no Norman coins at all had been discovered in any but one of the preceding thirty or forty years, the evidence of the types makes it as sure as any reconstruction of a deposit can be that the 1869 finds were originally associated. The halved penny found in 1873 was also of the Two Sceptres type, and one must suppose that it, too, came from the same source, and, accordingly, that it was possible for coins to lie on the shore for some years without being finally lost. A further halved penny of the Two Stars type, found in 1874, is only a little less certainly to be associated with the parcel. The age-structure of the group of coins suggests a date of deposit within the period

of issue of the Two Stars type, perhaps c. 1078, but the total is not large enough for the date to be certain.

There are traces of a hoard of Cnut, 5 of whose coins came to light in 1859 and the years immediately preceding.¹ With Short Cross coins of Shrewsbury and Winchester, and perhaps a Helmet coin of Chester, there may have been associated the two 'halfpennies' with portrait and short cross, but without legend on either side. No further coin of Cnut was found until 1867.

Three stycas which were found in the few years before 1863 must be supposed to have been associated, since no further coins of the series came to light subsequently.

The same may well be true of 2 sceattas of the Debased Head/Standard type, found in 1863-5 and 1867. Like the later coins of Æthelræd II and Cnut, one and possibly both of them were found in the very limited coastal zone within which other Anglo-Saxon antiquities occurred.

Two pennies and a York halfpenny of Richard II, and 2 York pennies of Henry IV or V, among the finds from before 1863, clearly represent a hoard from the early years of the fifteenth century.

Finally, 2 quarter-nobles of Edward III, that were in the 'Potter-Meols' collection, may have come from a single deposit; it is unlikely that they were stray losses because of their value.

It is likely that many of the thirteenth- and fourteenth-century coins were associated in their deposit in the same manner as those described above, but the hoards from which they came cannot be recovered.

The notes appended to the table on p. 112 show that roughly half of the coins were cut halves or quarters, or halfpennies or farthings. The proportion is far greater than that in the large savings-hoards of the period; site-finds are in this respect an independent and very important source of evidence for the composition of the currency. The penny, until the fourteenth century, was a coin with the purchasing-power of at least half-a-crown of today's money, so that it would appear, from the evidence of the hoards alone, that the larger coin of medieval England was hardly at all supplemented by a petty coinage, and that the monetary economy can hardly have penetrated into the day-to-day business of the market-place. The site-finds from Meols, however, indicate that the hoard-evidence is misleading, and that there was a great deal more petty coinage, even as early as the eleventh century, than one might have supposed.

120. MONYMUSK (Churchyard), Aberdeenshire

1823

Find-spot: 57.13 N., 2.32 W.; NJ 6815

1 *N* Arabic, dinar of Yusuf bin Tashfin, Marrakesh, 491. Found in digging a grave.

A.S. v. 23; *P.S.A.S.* 1924-5, 65.

121. MORTLACH, Banffshire

before 1894

1 *R* English: 1 *Æ* Byzantine (?).

A penny of Henry III was found in the garden of the manse. A Byzantine bronze coin, of the 'later period, with a cross very distinct, 120 gr.' is also recorded. The weight suggests that the coin was a specimen of Anonymous Type C (dated by M. Thompson 1034-41); Anonymous Types H, I and J usually weigh less than 7½ gm. The find is probably a traveller's keepsake, but whether a contemporary traveller one cannot be sure. Cf., however, the Monymusk find, above.

P.S.A.S. 1894-5, 60, 61.

122. MULL, Argyllshire

before December 1781

An 'ancient silver coin' from Mull was probably a medieval piece.

Smellie, i. 77.

¹ The evidence is not altogether clear, but see Smith's list of 16 Anglo-Saxon coins found up to 1867, in *H.S.L.C.* 1867-8, 113 ff., and the comment on the Winchester coin, *H.S.L.C.* 1858-9, 257.

123. NETHER DENTON (Parsonage), Cumberland

§ 1868

Find-spot: 54.58 N., 2.37 W.; NY 596646

1 Æ English, Edward penny.

T.C.W.A.A.S. 1874, 88.NEW DEER, *see* Whitehills.

124. NORTH BERWICK, East Lothian

§ 1920; § 1949

2 Æ Scottish, James III ecclesiastical coinage.

P.S.A.S. 1919–20, 35 and 1949–50, 109 ff., and 234.

125. NORTH UIST, Inverness-shire

before October 1781

Lord M'Donald donated to the Society of Antiquaries of Scotland 'a penny of Ædelred, q. ob. 872 found in North Uist'. Mr. Dolley has informed me of a manuscript note showing that the coin is in fact of Æthelræd II's First Hand type, and of the Thetford mint (moneyer Swegrling).

Smellie, i. 67; *N.Circ.* 1959, 159.

126. NORTHUMBERLAND

§ 1862

1 Æ English. A noble of Edward III was found 'on the Borders'. *Obv.* EDWAD; *rev.* an extra lis above the first lion, the French quarter with 3 fleurs-de-lis only (i.e. Lawrence Series A, or possibly B?).

A.A. 1865, 109.

127. OLD MACHAN (Churchyard), Aberdeenshire

§ 1860

Find-spot: NN 9015

1 Æ Scottish, lion of James II.

P.S.A.S. 1860, 246.

128. ORCHARDTON, Kirkcudbrightshire

§ 1922

Find-spot: 54.51 N.; 3.52 W.; NX 8052

1 Æ Scottish, James III ecclesiastical coinage. Found in the course of excavations, at Orchardton Tower.

P.S.A.S. 1922–3, 11.OSMUNDTHORPE HALL, *see* Leeds.

129. PRESTON (near), Lancashire

before 1846

An Alfred penny of Heribert of Lincoln, said to have been found near Preston, probably came from the Cuerdale hoard.

N.C. 1846, 163 ff.PATHHEAD, *see* Crichton Castle.

130. QUEENSFERRY, Linlithgowshire

§ 1865

1 Æ English, Edward penny, York ('Edward II, EBOR'), found 'near the old church'.

P.S.A.S. 1865, 397.

131. RIBBLE, River, Lancashire

before 1847

The provenance given for an alleged Worcester penny of Alfred, said to have been 'lately washed up by the *silvery stream* of the Ribble', is doubtless an allusion to the Cuerdale find.

N.C. 1847, 39 f.

132. RIBCHESTER (near), Lancashire before 1843

A coin of Plegmund, of a type similar to Ruding, pl. xii. 4 (*sc.* pl. xiii. 4), i.e. the standard type, was said to have been found near Ribchester, and not to have come from the Cuerdale hoard.

N.C. 1843, 64.

133. RIBCHESTER, Lancashire before 1897

1 Æ Anglo-Saxon, *styca* of Eanred.

L.C.A.S. 1897, 84 f.; *V.C.H. Lancaster*, i. 259.

134. RICHMOND (Hospital of St. Nicholas), Yorkshire 1832

Find-spot: 54.24 N., 1.44 W.; NZ 180010

1 Æ Anglo-Saxon, *secat* of Archbishop Ecgbert, with Æthelwald Moll (759–65), +EGBERTAR; +ÆDEALBIV (?), reverse poorly struck.

Gent. Mag. 1832, 304 and 601; coll. C. Clarkson. Cf. *N.C.* 1869, 93 f. with *Y.P.S.* 1913, 73. (Coll. Barnard Clarkson of Richmond and York; now in Yorkshire Museum.)

135. RUSHEN, Isle of Man § 1785

Find-spot: SC 1969

1 Æ English, half-groat of Edward IV, found in taking down one of the bastions of the castle.

A.S. 1831, App. 46.

ST. MEDAN'S CHAPEL, *see* Kirkmaiden.

136. SELKIRK (near) c. 1924–5

1 Æ English

A London penny 'of Henry III', found 1 mile south-west of the town.

P.S.A.S. 1926–7, 111.

137. SETTLE, Yorkshire § 1784

1 Æ English

A York coin, very much defaced, of Edward IV (groat or half-groat, legends reproduced).

Gent. Mag. liv. 671.

138. SHIPLEY, Yorkshire May 1950

Find-spot: 53.50 N., 1.47 W.; SE 1337

(betw. Wrose Road and Oak Bank Farm)

1 Æ English, Edward penny.

Y.A.J. 1952–5, 130.

139. SOUTH SHIELDS, Durham c. 1880; spring 1908; &c.

Find-spot: 55.0 N., 1.25 W.; NZ 3667

25 Æ English and Scottish.

The beach-finds from South Shields are of particular interest because they included a hoard containing numbers of coins of Robert II which were carefully described when the finds were published. Coins were found from time to time, over a period of more than thirty years, on the Herd Sands between the South Pier and the Fish Pier, and also occasionally between the South Pier and the Trow Rocks. They were mostly found near high-water mark after heavy easterly seas followed by strong westerly winds, the former washing the coins up with the sand, and the latter blowing back the sand and leaving the coins exposed on the surface. Coins were brought to light in this way, for example, after the

heavy seas of January–March 1908. It was suggested that they might have come from a vessel wrecked on the Herd Sand *temp.* Edward III, but I believe that this is not the correct explanation.

The occurrence of the coins is best illustrated from the later finds, which were published promptly. In 1908, the medieval coins found included Edward pennies of Durham and Canterbury, and Edward III groat and also pennies of London, an Edward IV half-groat of London, and a Perth groat of Robert II. In 1909 or thereabouts there was found a Long Cross penny, and at about the same time or a little later, 2 Edinburgh groats of David II, and Edward pennies of London, Canterbury, and Dublin. About 1911 were found some Short Cross pennies, an Edward penny, and a London half-groat of Edward III.

It is clear, on the one hand, that coins as far apart in date as Short Cross pennies and a groat of James I of Scotland cannot have come from a single deposit, and, on the other hand, that the preponderance of coins of David II among those published in 1893 reflects a treasure concealed or lost c. 1380–90:

<i>Scottish before 1249 and Short Cross 1180–1247</i>	<i>Alex. III 1249–85 and Long Cross 1247–79</i>	<i>John Baliol and Robert I 1285–1329 and Edward I and II 1279–1327</i>	<i>David II 1329–71 and Edward III 1327–77</i>	<i>Robert II 1371–90 and Richard II 1377–99</i>	<i>Robert III 1390–1406 and Henry IV 1399–1413</i>
0	1	1	8	19	0
1	0	6	2	0	0

A dozen or more coins of the fourteenth century found in the years 1908–11 included no issues of Robert II; this indicates that the finds of that year did not come from the same source as those published in 1893, and at the same time confirms that the earlier group of finds was coloured by a hoard. The correct explanation of the finds, therefore, may be that erosion of the coastline was destroying the site of a medieval settlement, rather than that the coins came from a wreck. This view finds some support in the occurrence of a number of Short Cross pennies in the finds of 1911; they probably came from another deposit.

I have listed the 1893 finds from the period 1327–c. 1400 as a hoard under South Shields no. 1. The great bulk of the coins doubtless came from the hoard, although perhaps not every single one did. Some of the Edward pennies listed below as stray finds may also have come from the hoard, but I have thought it best to exclude them.

The Short Cross finds of 1911 are similarly treated as a hoard, and entered under South Shields no. 2.

The remaining coins were as follows:

1. Short Cross penny, London, RAVF ON LVNDE (Classes V–VII, c. 1205–42). § 1885.
2. Alexander III, second coinage, penny, 4 mullets (of 6?). § 1885.
3. James I, groat. § 1885.
4. Edward IV, light half-groat, clipped to penny size, G on breast (? Canterbury, 1471–83). Found between the South Pier and the Trow Rocks, c. 1886.
5. Robert Bruce, penny. (1893.)
- 6–11. Edward pennies, Bristol, York, London, Durham of bishop Kellawe, Canterbury, London. (1893.)
- 12, 13. Edward pennies, Durham and Canterbury. 1908.
- 14–16. Edward III groat, and pennies, London. 1908.
17. Edward IV, London half-groat. 1908.
18. Long Cross penny, VO ONG LOV (Gloucester, ? Ion, Classes II–IIIc, 1248–50). 1909.
- 19–20. Edinburgh groats of David II, one with flat-ended cross as i.m. 1909.
- 21–23. Edward pennies of London, Canterbury, and Durham. 1909.
24. Edward penny. 1911.
25. Edward III half-groat. 1911.
26. Edward halfpenny of Canterbury.

P.S.A.N. 1885–6, 334; 1893–4, 103 f.; 1907–8, 193; 1909–10, 124, 224, 228; 1911–12, 3; *Proc. Soc. Antiq.* 1901–3, 43; *N. Circular* 1911, col. 12833.

140. STANNINGTON (Churchyard), Northumberland § 1901
 Find-spot: 55.7 N., 1.39 W.; NZ 2179
 2 Æ English, Short Cross penny, Edward penny.
P.S.A.N. 1901-2, 125.

141. STEVENSTON SANDS (near Irvine), Ayrshire § 1920
 Æ Scottish, several James III ecclesiastical coinage, found at various times.
P.S.A.S. 1919-20, 35.

STONEKIRK SANDS, *see* Luce Bay.

142. STRATHDON, Aberdeenshire § 1865
 1 Æ Scottish, William I, found in a cairn.
P.S.A.S. 1865, 31.

STRUAN, *see* Dun Beag.

143. SYMINGTON (near), Lanarkshire § 1863
 1 Æ English, Edward penny, London, found in a moss.
P.S.A.S. 1863, 55.

144. TANTALLON CASTLE, East Lothian § 1908
 Find-spot: 56.03 N., 2.39 W.; NT 596851
 1 Æ Scottish.

A penny of the ecclesiastical coinage of James III was found on the beach near the foot of the cliff on which the castle is built.

P.S.A.S. 1928-9, 14; 1932-3, 14.

145. TARBAT (Churchyard), Ross-shire § 1892
 Find-spot: 57.49 N., 3.49 W.; NH 9487
 1 Æ Foreign, a sterling.
P.S.A.S. 1891-2, 60.

146. TRAPRAIN LAW, East Lothian May 1919
 1 Æ Scottish.

James III ecclesiastical coinage (lost by beacon-keeper in fifteenth century?).

P.S.A.S. 1919-20, 35 and 55.

147. UGADALE POINT (Stack Fort), Kintyre, Argyllshire 1939
 Find-spot: 55.30 N., 5.31 W.; NR 785285
 1 Billon Scottish, Edinburgh penny of James IV.
P.S.A.S. 1954-5, 19.

VICKERSTOWN, *see* Walney.

148. WALLASEY, Cheshire § 1865; 1872
 2 Æ English.

An Edward penny of London, found by a young market gardener while sowing peas; an Edward penny of Bristol found in 1872.

H.S.L.C. 1865-6, 215-16; 1872-3, 121.

149. WALNEY (Vickerstown), Lancashire 1908

Find-spot: (Douglas Street) 54.7 N., 3.16 W.; SD 1868
1 R English, an Edward penny, found in Douglas Street.

Barrow Naturalists' Field Club, xvii. 216.

150. WEST KIRBY (St. Bridget's Church), Cheshire c. 1870

Find-spot: 53.22 N., 3.11 W.; SJ 218864
1 R Scottish.

A penny of Alexander III's second coinage was found while restoring the church.
H.S.L.C. 1870-1, 126.

151. WHITBY or vicinity, Yorkshire (?) before 1893

A styca donated to the Yorkshire Museum by a resident of Whitby may have been a local find. Cf. the Whitby hoard above.

Y.P.S. 1893, 29.

152. WHITEHILLS (New Deer), Aberdeenshire § 1863

1 N English.

A half-angel of Edward IV is described.

P.S.A.S. 1863, 298.

153. YORK, Naburn Ings 1753

2 R Anglo-Saxon.

Deposit: after 774

Some workmen making a cut in Naburn Ings, near York, in order to fix a new lock in the River Ouse, found at a depth of 10 feet the skeleton of a man, entire, in a bed of stiff clay, and near it 2 silver sceattas, one with the name of Æthelred; the inscription on the other was not understood. This may in fact have been a grave-find.

Gent. Mag. 1753, 199.

154. YORK, Micklegate Bar § 1827

Find-spot: SE 598515

A coin of Wigmund was found under the rampart adjoining Micklegate Bar. (May it not have been one of a number? cf. the entry 'York (?) § 1827' under Hoards.)

Y.P.S. 1827, 61.

155. YORK § 1845

Find-spot: SE 596521(?)

1 R English.

An Edward penny of London, found (with other coins?) in railway works, near St. Mary's tower, at the end of Manor Terrace Walk.

Arch. Jl. 1846, 189.

156. YORK, Red Tower 18 August 1847

Find-spot: SE 610517

1 R Anglo-Saxon, a 'Hand' coin of Æthelræd II.

Y.P.S. 1913, 46 (noted under no. 85).

157. YORK, Lord Mayor's Walk § 1848

Find-spot: SE 604524

1 R English, Edward penny.

Y.P.S. 1848, 23.

158. YORK

June 1848

A farthing of Henry IV, V, or VI

Y.P.S. 1920, xv-xvi.

159. YORK

1874

1 R English, a Long Cross penny.

Y.P.S. 1913, 18.

160. YORK, River Ouse

§ 1880

Medieval coins were found while dredging the river.

Y.P.S. 1880, 37; cf. N.C. 1958, 94.

161. YORK

1885, 1886

A sceat, of copper (?), *obv.* three-quarters length figure holding a crozier; *rev.* horned animal l. with long tail curved between legs, was said to have been found in 1885, and another, *obv.* profile head l.; *rev.* bird, in 1886.

Y.P.S. 1913, 33.

162. YORK, The Mount

1888

Find-spot: SE 595511

1 R Anglo-Saxon, a sceat of archbishop Ecgberht with Eadberht, *obv.* ELGEBEHT ƿR, cross; *rev.* ƿTBEREHTETƿ, figure holding crozier and pastoral staff. Cf. no. 165 below.

Y.P.S. 1913, 73 (two coins?).

163. YORK, Heworth

§ 1889

Find-spot: SE 6050

1 R Scottish, penny of Alexander III.

Y.P.S. 1889, 33.

164. YORK, New Gas Works

before 1913

Find-spot: SE 610523

A sceat of Eadberht, *obv.* ƿTBEREHTƿ, cross; *rev.* horned animal l., forepaw raised, arabesque below. Cf. 162 above.

Y.P.S. 1913, 34.

165. YORK, Monkgate

date?

Find-spot: SE 607524

An English halfpenny (from the context in the account, perhaps thirteenth or fourteenth century?).

Y.P.S. 1920, xv-xvi.

166. YORK

before 1925

A Saxon styca, donated by Dr. H. A. Phillips.

Y.P.S. 1925, 32.

167. YORK, Heworth

before 1934

Find-spot: SE 6050

1 R English, a Durham penny, both sides reverses.

Y.P.S. 1934, 44.

168. YORK, Holgate Hill (earthwork)

May 1936

Find-spot: SE 58055180 (?)

1 Æ Anglo-Gallic jetton, c. 1300.

Y.P.S. 1938, 42.

169. YORK, Assize Courts

§ 1937

Find-spot: SE 603515

1 Æ English, penny of Edward II, found during excavations.

Y.P.S. 1937, 49.

170. YORK or vicinity

§ 1938

Æ, Æ, single-finds. An 'Edward I York groat' and a quarter-noble of Henry VI were discovered during local building operations. On the gold coin see the note under York 1939.

Y.P.S. 1938, 31.

171. YORK

§ 1939

Æ, Æ, single-finds. An Æthelræd II penny of York, of a variety not in *B.M.C.*; a Long Cross penny of Group III; an Edward I penny of Class IV; a quarter-ryal of Edward IV of York. May not the last coin and the gold coin listed under York, 1938 have come from a hoard of small gold pieces deposited c. 1470?

Y.P.S. 1939, 24.

172. YORK, St. Mary's Abbey

1952

Find-spot: SE 599522

A coin of 'Æthelberht II' was found in the course of archaeological excavations. Mr. Wilmot has informed me that the report in *Y.P.S.* referring to 'Æthelberht II' was a misprint for 'Æthelred II'.

Y.P.S. 1952, 22.

III. ADDENDA

*Inventory*3. Aberdeen. *See* Wellington St. Footdee, below.5. Aberdeen. *P.S.A.S.* 1937-8, 178 and 233.18. Ayr 1892. *P.S.A.S.* 1923-4, 168.38. Beaumont. *P.S.A.* 1883-5, 191 f.45. Blackhills. *See* Parton, below.46. Bongate. *P.S.A.S.* 1950-1, 173 f. and references.50. Bowness. *P.S.A.* 1883-5, 137 f.; *T.C.W.A.A.S.* 1886, 381 and 1923, 237.

— Bramham Moor (*N.C.* 1958). *Y.P.S.* 1913, 18 mentions York coins, but without references.

55. Brechin (church-yard) 1785. Coins of Alexander III with 28 points (mint?). For notices of donations and details of the spoons, *A.S.* 1831, App. 41 f., 44 f., 45, 52; *P.S.A.S.* 1934-5, 147.

61. Burray. *P.O.A.S.* 1924-5, 87.65. Cadder. *A.S.* 1860, App. 35; *P.S.A.S.* 1860, 439.66. Caldale. *Smellie*, i. 39.70. Canonbie. *P.S.A.S.* 1923-4, 168, where the date is given as 1861.76. Carsphairn. *P.S.A.S.* 1913-14, 371.

79. Castleton. Without doubt, one coin of Æthelred was found; it is illustrated in Bateman's *Catalogue*. The records, unfortunately, do not show very clearly how many more were discovered. The coins were probably not a hoard. Bateman states that

- 'stycas of Æthelred and lead objects' were found 'in earth slipped down from the hill'. Another account is that 'within the area of the castle yard are sometimes found . . . stycas of the Northumbrian kings . . .'. T. Bateman, *A Descriptive Catalogue of the Antiquities in the Museum of Thomas Bateman*, 1855, 161 f.; *Vestiges of the Antiquities of Derbyshire* . . ., 1848, p. 171.
80. Catal. *Y.P.S.* 1913, 18.
— Cawthorne. *See* no. 393 below.
83. Chester 1862. *H.S.L.C.* 1862–3, 243; *Y.A.T.J.* 1875–6, 80.
92–93. Closeburn. *P.S.A.S.* 1900–1, 277.
112. Cuerdale. *A.A.* 1844, App. 11; *Y.P.S.* 1920, xv–xvi; *P.S.A.N.* 1929–30, 111 ff.
148. Durham 1889. *Y.P.S.* 1891, 32; *A.A.* 1895, xiii.
150. Dyke. 1 coin of Roxburgh, Raul, donated in 1782 by W. Dunbar, Smellie, ii. 72 f.
158. Fauldhouse. *P.S.A.S.* 1913–14, 17.
159. Fenwick Tower. Smellie, i. 68, gives the total as 226 coins; they were found under a paved floor, lying in sand. Deposit, 1346?
165. Fortrose. *P.S.A.S.* 1947–8, 322.
171. Glasgow, 1787. Note that the date is given by Lindsay. *A.S.* records the donation of 9 coins, and gives the exact find-spot as 'at the foot of Niddry's Wynd'. Mints: London, York, Newcastle, Durham, Canterbury. *A.S.* 1831, App. 65.
188. Hexham. *Y.P.S.* 1833, 17 (coins donated by Lord Mayor and Corporation of York); 1839, 21 and 1840, 25 (by a Mr. Keld or Kell); *A.A.* 1844, App. 12; *A.S.* 1860, App. 21; *P.S.A.N.* 1929–30, 111 ff.
196. Inch Kenneth. *A.S.* 1860, App. 5.
225. Kirkoswald. *A.A.* 1822, App. 3.
234. Lindores. *P.S.A.S.* 1950–1, 173 ff.
235. Linton. 'W. J. Andrew exhibited 2 coins of Matilda, 2 of Roger Earl of Warwick, and 2 defaced coins of Stephen', *L.C.A.S.* 1884, 120; may not these be from the Linton hoard?
266. Mellendean. *P.S.A.N.* 1911–12, 139, and 1925–6, 138; *P.S.A.S.* 1911–12, 374, 1913–14, 17, and 1951–2, 211 f.
273. Morayshire. In 1820, the Society of Antiquaries of Scotland had 73 'duplicates' of the coins of William the Lion, besides the 7 in the trays of their cabinet, which were as follows: LE REI WILAM: Adam on Edenbv, Ravl on Rocbvr, Hve on Enebv, Adam Berwic, Folpoit de Per; LE REI WILA: Hve Walter; W . . . LM RE: Walter on P . . . et. Another coin had the moneyer's name Adam Roci. *A.S.* 1822, App. 8 and 31.
286. Newminster Abbey. *P.S.A.N.* 1926, 47 and 137.
302. Paisley 1782. *See above*.
— Parton 1911 (45. Blackhills). *P.S.A.S.* 1910–11, 569 ff.; 1911–12, 14. *See also* Parton in list I above.
304. Peeblesshire. *A.S.* 1860, App. 35.
309. Perth. *P.S.A.S.* 1920–1, 24.
311. Portobello. Early October 1852 . . . in the earth . . . about 600 . . . mostly of Alexander III and the Edwards. Lindsay, *S.*, App. 52; *A.A.* 1855, App. 20; *P.S.A.S.* 1851–4, 226—privy-marks of 11 Scottish coins listed.
331. Skipton Bridge. The hamlet of Skipton Bridge is about 5 miles from Thirsk, and some 25 miles from Skipton, under which name the hoard is listed in the *Inventory*. *Y.P.S.* 1949–50, 16 and 1950, 17.
341. Stanley. *A.S.* 1860, App. 33.
357. Tiree 1782. Earthen vessel. Smellie, ii. 67 f.
364. Ulleskelf. *Y.P.S.* 1847, 26, 27.
— Wellington St. Footdee (3. Aberdeen). Lindsay notes that 16 old coins were sent to the Antiquarian Society on 16 May. *A.S.* 1831, App. 147, under 23 May 1827, records that several groats of James III of Scotland were presented by the Exchequer.
382. Wyke. *Y.P.S.* 1922, 29.
384. York, Bootham. *Y.P.S.* 1920, vii.
386. York, Bishophill. *Y.P.S.* 1882, 9 (date, 'last summer'); *pace* Thompson, *see Y.P.S.*

- 1910, 1-12 and pl.; note also that the C. Wakefield collection included 162 pennies and halves from the hoard. *Y.P.S.* 1920, vii.
387. York, High Ousegate. *Y.P.S.* 1913, 97 (moneyers Outhbeorn and Thorr).
388. York, Jubbergate. *Y.P.S.* 1845, 21 (1 of Edward Confessor); 1911, xxxi; 1913, 17 and 98 f. (find-spot, corner of Coney St.).
391. York, St. Leonard's Place. *Y.P.S.* 1842, 22; 1844, 30.
392. York, Walmgate. *Y.P.S.* 1913, 67 and 78 (St. Peter's penny without sword; date given as April 1856; find-spot, corner of Paver Lane).
393. Yorkshire 1861. The hoard was found at Cawthorne. Fifteen coins from it were exhibited at a meeting of the Historic Society of Lancashire and Cheshire. *H.S.L.C.* 1862-3, 243.

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THE SILVER COINAGES OF RICHARD II, HENRY IV, AND HENRY V

By W. J. W. POTTER

PART II. HENRY IV

(A) THE HEAVY COINAGE

HENRY IV's mintmaster took over the Tower mint in the early days of October 1399, and his accounting commences on the 14th. We may be sure that he had instructions to commence striking coin at the earliest possible moment, both for economic as well as propaganda purposes, but it would be some little time before new dies could be prepared. We have already seen that the earliest small silver may have been struck with Edward III and Richard II dies,¹ the latter perhaps with the name mutilated when obverses were used.

The old weight standards, which were already proving too high in the previous reign, were maintained unchanged during the greater part of the reign of Henry IV, and in consequence the bullion records of silver for this period make dismal reading. The figures given by Miss E. Stokes,² plus a subsequently ascertained division of the first three years' total,³ are as follows:

14.10.1399-29.9.1400	.	.	.	.	452 lb.	
29.9.1400-29.9.1401	.	.	.	.	150 "	
29.9.1401-29.9.1402	.	.	.	.	85 "	
29.9.1402-29.9.1403	.	.	.	.	129 "	
29.9.1403-24.1.1404	.	.	.	.	185 "	(Change of warden)
24.1.1404-29.9.1404	.	.	.	.	176 "	
29.9.1404-29.9.1405	.	.	.	.	70 "	
29.9.1405-29.9.1406	.	.	.	.	81 "	
29.9.1406-29.9.1407	.	.	.	.	64 "	
29.9.1407-29.9.1408	.	.	.	.	6 "	
					<hr/>	
					1,398 lb.	

That this total of 1,400 lb. in nine years did not provide a greater number of coins than have actually survived, viz. 5 half-groats, 5 pennies, a score or more of halfpennies, and possibly one or two farthings, is no doubt due to the melting down of the heavy money when the weight basis was reduced in 1412. As to the absence of any heavy groat in Henry's name, although there was still a great emphasis on the necessity of providing small change for the public, it is usually considered unlikely that one was not struck. In my article on the silver of Richard II I mentioned the theories that have been advanced suggesting that certain groats with the name **RICARD** were Henry's heavy issue, but I remain unconvinced. The fact is that hoards of this period are very scarce, and we can only hope that the future will provide more evidence for the coinage of this reign.

The five half-groats, distinguished by the star on the breast, are of almost

¹ The Silver of Richard II, *B.N.J.* xxix, 334.

² *N.C.* 5 ix.

³ Exchequer Accs. Bundle 293, no. 2.

identical appearance, though they are, in fact, from two obverse and two reverse dies. Details are as follows:

Obv. HENRIC·DI·GRA·REX·ANGL·Z·F·,

Rev. POSVI·DEVIN·A·DIVTOR·EM·MEV, unbarred Roman 'N's in LONDON.

1. Die 1/Rev. 1 (FAW-I 233 = RCL 1369, now Ashmolean).
2. Die 1/Rev. 1 (BM., Pl. X, 1).
3. Die 1/Rev. 2 (Ashmolean).
4. Die 2/Rev. 1 (Rashleigh 698 = Grantley 1386).
5. Die 2/Rev. 2 (RCB).

The obverses recall die 8 of Richard II, and the busts might be from the same punches, but larger fleurs have been used for the tressure cusps. The lettering, where visible, does not appear to include any of the Edward III punches, but is of a more regular and individual style, tending towards the later Henry IV type with waisted uprights and distinctive 'G'. The reverses, on the other hand, are very similar in style to type IIIb of Richard II, except that the 'N's in LONDON are unbarred. I have not found a specimen clear enough to identify the 'R' used on these dies.

The five pennies are also from two obverse dies with star on the breast but have different reverses, as follows:

Obv. HENRIC·D·G·REX·ANGL·R·

1. Die 1/Rev. 1—LONDON, CIVITAS not visible (RCB).
2. Die 1/Rev. 2—LONDON, pellets as trefoils, shamrock-shape (Mule reverse with Rich. II—RCB ex FAW-II 231).
3. Die 1/Rev. 3—Similar to 2 but different die. (CEB ex Rashleigh 699 and J. S. Fox.)
4. Die 2/Rev. 4—Similar to 2 (BM ex RCB).
5. Die 2/Rev. 5—LONDON, normal pellets, extra small one in two quarters (FAW-I 234, II 230).

Obverse die 1 has a bust very similar to that of the half-groats, and it is distinguished by three very small pellets above the crown. Die 2 has a rather larger head and the star is not visible on the breast on the two known specimens. The lettering on these two dies is identical with that of the half-groats.

The reverses are all apparently from different dies, and are of three types. Type 1 (Rev. 1 above) is unique in having Roman 'N's in LONDON, and it is unfortunate that the only coin on which it appears has been so clipped that the word CIVITAS is no longer visible. The die, however, is of the same style as the earlier reverses found on the Richard II pennies with saltire before CIVI, though the lettering is, in fact, of the later fish-tail type which I have not seen on any Richard II penny die. Type 2 (Rev. 2, 3, and 4), of which there are three versions, is definitely of later Richard II type, and, in fact, as already mentioned,¹ one of the three dies (Pl. X, 11) is known used with a Richard II obverse. Finally, type 3 (Rev. 5 above), represented by one coin, is of the same

¹ Article, Richard II.

style as type 2, but has the new lettering, and a small extra pellet in two quarters, probably representing the definitive Henry IV type.

The heavy halfpennies (Pl. X, 20) have the English title only, with varying endings—**ANGL**, **ANGLI**, and **ANGLIE**, the stops being single or double saltires or double pellets. There is usually nothing in the field, but a heavy halfpenny with annulets by the neck appeared in the Lockett sale, under no. 1373. Annulets complete or broken are actually a privy mark of the light coinage, but this coin in style, lettering and weight undoubtedly belongs to the heavy coinage. Walters lists¹ a heavy farthing, but the identification of these, being dependent entirely on weight, is rather doubtful.

(B) THE LIGHT COINAGE

The reasons for the failure to attract bullion to the mint during this reign were well known to all the interested parties, but they were reluctant to agree to the obvious and only possible remedy of reducing weights, so constantly practised on the Continent, but usually successfully opposed in this country. The king, though desirous of doing so, was unable to take the initiative owing to the Statute of Purveyors of 1352, which forbade his altering the basis of the coinage without the consent of Parliament. However, after nearly four years during which the mint appears to have been idle,² the Parliament of November 1411, presided over by the Prince of Wales, decreed a reduction in the weight of the penny from 18 to 15 grains to take effect as from the following Easter Day 1412, and the result was to make it possible once more to coin at the mint with a small profit to the king. Nevertheless, the reduction would not have been much more than sufficient to keep pace with the rise in value of silver measured in the worn and clipped money then in circulation. The greater part of this was still money of Edward III, according to the evidence of hoards, and the total weight of silver coined in the first year to 28 November 1412 was only 1,940 lb.

As to when work on the light money commenced, Walters, in his 'Coinage of Henry IV', (*N.C.* 4/v) writes:

The new coinage was taken in hand without delay. On May 6th, 1412, Thomas Drayton was appointed Assayer of the Tower Mint, and on September 22nd an order was issued requiring Henry Somer, as Warden of the Mint, to secure moneyers and die engravers for the work.

The assumption here is that work on the lighter money did not commence until some time after the date on which the reduction actually came into force, i.e. 3 April 1412, not, in fact, until the September following, which seems highly unlikely to me, and contrary to the normal procedure of the time. What actually happened, however, was that a new indenture was signed a few days after the passing of the Act, with a new mintmaster, Richard Garner, and at the same time Henry Somer was appointed Warden, both appointments taking effect as from 29 November 1411. (See Miss

¹ 'The Coinage of Henry IV', *N.C.* 4/v.

² Accounts for the years Mich. 1408–29.11.1411 for both gold and silver are missing, but in view of the steadily declining output previously it seems more than likely to me that the mint was closed during this time, especially as the accounts reopen on the curious date of 29 November, directly following the Parliament which decreed the reduction in weight.

Stokes's Bullion Tables.) The probabilities are, therefore, that purchase of bullion on the higher basis was soon commenced, and arrangements put in hand for production so as to have some coin available for immediate issue when required.

The preparation of the dies and striking of the money, however, would have presented considerable difficulty. If the mint had, in fact, been closed since Michaelmas 1408, the skilled staff would have been dispersed into other employment, and it would have been necessary to improvise in the preparation of the dies. As we shall see, the earlier coins are just such as might be expected from an emergency issue produced under the conditions described, and the subsequent order of 22 September is thus easily explainable. Dissatisfaction had doubtless been widespread with the work of the inexperienced staff which it had been possible to obtain in this country, and authority was probably sought to invite skilled engravers and moneyers from the Continent, as was the normal custom in such circumstances.

This leads on to the question of where to draw a dividing line between the issues of Henry IV up to his death on 20 March 1413, and the early issues of Henry V, a question which has exercised the minds of numismatists for many years. The most authoritative survey of this period hitherto available is that published by Dr. Brooke under the title of 'Privy Marks in the Reign of Henry V' (*N.C.* 5/x, 1930). The author, though disclaiming any importance for the question of fixing a beginning to the coinage of Henry V, makes the 'Emaciated Bust' issue the first of the new reign, on the following grounds:

... the light coinage had just one year to run before the King died on 20th March, 1413. The light nobles preceding the 'Emaciated Bust' issue are ample to fill this period; the four varieties of position of the fleur-de-lis in the reverse design may very well mark the four quarters of the year, April 1412 to March 1413. The silver is similarly adequate for the period, and has in the legends and stops, ample variety for so short a period.

The distinctive feature of the so-called 'Emaciated Bust' issue is the new, short, broad lettering, which is found on all the denominations. However, most of the earliest small silver with the new lettering retains the annulet and pellet beside the crown which have been widely accepted as the distinctive mark of coins of Henry IV, whereas on the groats these marks are confined to the coins with the old lettering. On this point Brooke writes as follows:

As on the half-groats (with one exception) and smaller coins of the 'emaciated bust' issue the annulet and pellet appear beside the crown, this brings me into conflict with the 'annulet-and-pellet' theory. There can be no doubt that the annulet and pellet were marks used on the coins of Henry IV, but I see no great difficulty in these marks being still used on some dies after the accession of Henry V; indeed it seems to me more difficult to suppose that such marks would be set aside because a new king had come to the throne.

The real question, of course, is what did these two marks originally signify, and I think they were used to differentiate the light coins of Henry IV from previous issues, starting with the altered dies and continuing on the definitive coins until a complete change of style made them unnecessary. Their use on some of the early small coins of Brooke's pre-mullet classes confirms to my

mind that these were struck by Henry IV.¹ As to Brooke's own theory, I think it is dangerous to base any argument on such a controversial matter as privy marks. I am not at all satisfied that 3-monthly production periods were marked on the coins. I have given my views on this at some length when writing on the silver of Edward III (*N.C.* 1960), and also on the groats of Henry VI in this *Journal*.²

For my own part, I prefer to approach the problem from an entirely different angle, and the first thing to decide is the effect of the ordinance of 22 September already mentioned. It seems to me that the results we should expect if, in fact, foreign engravers and moneyers were employed would include a new style of bust and lettering, and this is exactly what we find with the introduction of the 'Emaciated Bust' coinage. We cannot, of course, do more than guess the time which elapsed after 22 September before the results of the ordinance were apparent, but new reverses were used some time before the obverses, and I do not think it unreasonable to assume that striking with the old style dies finished soon after the end of Somer's first year of office, during which, according to the bullion records, 1,940 lb. of silver were purchased up to 29 November 1412. Is there any way in which we can check this?

A reference to my classification list of Henry IV groats will show that the coins described in it are the product of eleven obverse dies. In my article in this *Journal* on the groats of Henry VI, already referred to, it was suggested that on an average one obverse groat die could deal with 100 lb. of silver, and if we assume that, of the 1,940 lb. of bullion, 1,500 were struck into groats, then the eleven dies mentioned fit very well into the picture, assuming also that there were one or two others from which no coins have survived.

The second year of Somer's accounting runs from 29.11.1412 to Michaelmas 1413, during which period 3,642 lb. of silver are recorded as having been purchased. I think it reasonable to assume that during the four months left of Henry's lifetime up to April 1413, a further 1,500 lb. of silver was coined of which most was struck into groats. This would have required another fifteen obverse dies, and this is almost exactly the number needed to produce the known groats without annulet or pellet by the crown or mullet on the breast.

As to Henry V, I make no apology for returning to the old idea that the mullet on the large coins, and the mullet and/or the broken annulet on the smaller, were used to differentiate his issues. There are, it is true, a very few gaps when the mullet was not used, which are difficult to explain, but that this could have been a mere privy mark seems to me incredible. The purpose of a privy mark as hitherto used has always been to distinguish certain dies of an issue, perhaps for accounting purposes, perhaps to indicate the engraver or workshop, but the mullet and broken annulet figure on a whole coinage for nearly ten years.

Furthermore, there are quite a number of cases where the mullet was struck in on dies not originally bearing it, an occurrence I cannot remember to have

¹ The fact that the half-groats of my types I and V have the annulet and pellet but VI has the mullet seems clear evidence that the division between the reigns occurs at this point, as I have suggested.

² *B.N.J.* xxviii, pt. ii.

been duplicated elsewhere during this period, and to me one more proof that much more than a privy mark was concerned. I repeat that I think the use of these emblems was intended to differentiate the coins of the new reign without scrapping the dies still in use, remembering that this was the first time since the introduction of the groat and half that the name had not been changed with the change of monarch.

The foregoing indicates my view of what actually took place, but though I do not share Dr. Brooke's opinion that:

The difficulty of fixing a beginning and an end to the coinage of Henry V's reign is not very material; for this purpose we are more concerned with the order in which the issues run than with the dates at which they were struck.

for convenience sake I propose to continue to attribute to Henry IV all the dies with the old form of lettering, and to Henry V all the new. The two forms are very distinct, and they do provide a division such as we like to imagine existed between the issues of two reigns, but which, in fact, rarely if ever did.

1. *Groats*. The identification of Henry IV obverse groat dies under the above system is a simple matter, as all those with the distinctive Henry IV lettering have annulet and pellet beside the crown, and these marks occur on no other groats except those from the three altered dies of Richard II also used for the light coinage. This special lettering continued in a somewhat exaggerated form the waisted style of the late Richard II coins, with arched serifs, but added a distinctive angular shape to the curves of such letters as 'C', 'D', 'E', 'G', and 'O'. The surviving coins are scarce but not of great rarity, and I have noted thirty-six from eleven obverse dies, including the three altered from *RICARD*, and they may be divided into the following three classes:

- I. Three Richard II dies without the French title, overstruck *HENRIC*, with pellet to left and annulet to right of crown. (7.)
- II. Two dies with abnormal tressures, one with eight and the other with ten arches, with annulet to left and pellet to right of the crown. Henry IV lettering. (7.)
- III. Six dies with normal tressures of nine arches, usually with slipped trefoil at the end of the legend, otherwise as II. (22.)

Before describing these coins in detail it will be convenient to examine and classify the reverses found with them, which are in some ways more complex than the obverses. The true Henry IV reverse dies, that is, with the distinctive lettering already described, found used on the above thirty-six coins number only nine, which is much below the normal ratio of three reverse to one obverse die at this time. The rest are made up of three abnormal reverses found with the obverses of type I, and a number of dies with the new lettering and style used with obverses of Type III.

The first-mentioned dies I propose to discuss in detail when describing the groats of class I, while the new reverses will be dealt with in the article on the silver of Henry V. The latter are quite distinct in style from either of the other two types, having the outer and inner circle lettering of the same size and

the circles themselves formed of larger strokes, making them much more conspicuous.

The nine Henry IV reverses are at once distinguished from the rest, apart from the lettering, by having a slipped trefoil in one of the legends, and they fall into four classes according to the division of the outer circle legend, the position of the slipped trefoil, and the obverses with which they appear, as follows:

1. I-1. POSVI*/DEVM:Æ/D:IVTORE/M:MEVM*, CIVI/TAS/♣LON/
DON. (*Obv.* II-1).
2. 2. POSVI*/DEVM:Æ/D:IVTORE/M:MEVM♣, CIVI/TAS/LON/
DON. (*Obv.* I-1).
3. II-1. POSVI♣/DEVM:ÆD/IVTOREM/ÆMEVM, CIVI/TAS/LON/
DON. (*Obv.* I-1).
4. 2. (As II-1, but different die). (*Obv.* II-2, III-2).
5. 3. POSVI♣/DEVM:ÆD/IVTOREM/ÆMEVM, CIVI/TAS*/LON/
DON. (*Obv.* III-2).
6. III-1. POSVI♣/DEVM:Æ/D:IVTOR/EM:MEVM, CIVI*/TAS*/LON/
DON. (*Obv.* III-1, HVI-1).
7. 2. POSVI♣/DEVM:Æ/D:IVTOR/EM:MEVM, CIVI/TAS/LON/
DON. (*Obv.* III-4).
8. 3. /EM:MEVM, CIVI/TAS/LON/DON.
(*Obv.* III-5).
9. IV-1. POSVI♣/DEVM:Æ/DIVTORE/M:MEVM, CIVI/TAS/LON/
DON. (*Obv.* H.V. VIa).

No. 8 in this list is to be found on a very worn and clipped groat which formed part of the recently discovered Glenluce hoard. I have classified it as III-3 because of the legend ending **EM:MEVM**, the only part of the outer circle legend which is visible. The Lombardic form of the second 'N' in **LONDON** has been obtained by the use of a half-groat punch, and is one of those inexplicable happenings which make the coins of this period of such absorbing interest.

By the legend ending, no. 9 might appear to belong to type I, but the position of the slipped trefoil and the absence of stops in the word **ÆDIVTOREM** makes this improbable, and I have accordingly given it a class of its own as the last of the Henry IV reverses, especially as it is found used only with a definitive Henry V obverse (BM ex LAL).

As with the previous reigns, the legend endings of the outer circle of the reverse certainly seem to have had some privy significance. It will be noted that each of the first three reverse classes above has its own form of ending. In addition it may be said that the two Transitional reverses found with the Type I obverses and shortly to be described, have the same ending as the class I reverses they presumably preceded, i.e. **M:MEVM**, while the earliest new reverses of Henry V also have this ending, confirming the probability that it was used a second time for the last reverses of Henry IV.

We are now in a position to describe in detail the surviving groats of the three types listed at the beginning of this section. There can be little doubt that the Richard II dies with the English title only were the first to be put into

use for the light coinage. They were apparently found still in good condition in the mint, and were altered by striking **HENRIC** over **RICARD**, putting a pellet to the left and annulet to the right of the crown, and adding a slipped trefoil over the breast fleur. I have noted the following seven coins from these dies:

I. Die 1—Legend ends **ANGLIE**. Richard II style and lettering:

Rev. 1: **✠POSVI/DEVM: A/DIVTORE/M: MEVM**, Transitional die no. 1 (Roth-I 193 = FAW-II 236, now BM). (**Pl. VIII, 1.**)

Rev. 2: H. IV die II-1 (2 coins: Talbot-Ready 383 now BM, and FAW-I 240 = RCL 1377). (**Pl. VIII, 2.**)

Rev. 3: H. IV die I-2 (FAW-II 237 = RCL 3071).

Die 2—Legend ends **ANGLIE***. Similar to 1:

Rev.: **—POSVID/EVM: AD/IVTORE/M: MEVM**, Transitional die 2 (2 coins—FAW-II 238 = HAP 297 now DM, and BM). (**Pl. VIII, 3.**)

Die 3—Legend ends **ANGLIE**†. Henry IV style and lettering:

Rev.: **✠POSVI/DEVM: A/DIVTOR/EM: MEV**, Richard II style die. (Grueber 310 at BM). (**Pl. VIII, 4.**)

There are several interesting points about these coins. Dies 1 and 2 are certainly of late Richard II style, and though the lettering is not very clear on any of the specimens I have examined, some letters such as the 'R' and 'G' are definitely from the normal Richard punches. The crown is probably from the punch used on the transitional Richard die III-2. This die was the first to have the king's name in the form **RICARD.DEI**, which appears on these **ANGLIE** coins. The same face punch was probably used for both dies 1 and 2, but it bears no resemblance to that on the Richard die mentioned. The hair also is quite different in the two cases. The **ANGLIE** dies have bushy hair placed close to the cheek on each side, whereas the Richard III-2 has the new later style with well-separated curls placed away from the cheek on the left side. The question of the omission of the French title is also relevant to the date of production, and this tallies very well with the years 1395/6, about the time of the king's French marriage, which have already been suggested for Richard's transitional dies and the crescent groats.

Die 3 with the **ANGLIE** title is very different from the other two, and is altogether a very curious piece of work. It has the thin neck and face and sparse curls, wide at the sides, which are typical of some of Henry IV's light coinage dies, but the crown is from the same punch as dies 1 and 2. The few letters which are clearly visible seem to be of mixed style; the 'G' of **GRA** for instance is of late Richard II style, while the 'G' in **ANGL** is pure Henry IV light type. It is unfortunate that the flan was incorrectly centred on the obverse so that the legend ending and the name **HENRIC** are not clear. There appears to be another letter after **ANGLIE**, which I have assumed to be a curved contraction mark, but as the word is not abbreviated, the matter is in doubt. Then as regards the name **HENRIC**, the only letter showing signs of having been altered is the last which does seem to have been struck over or just preceding a 'D'. Nevertheless, if it were not for the English title, I would like

to think that, before the addition of the annulet and pellet, the die might have been produced to strike Henry's heavy groat, though perhaps never used for this purpose.

The reverses found on the seven known specimens of Type I are as interesting as the obverses. The two Henry IV reverses found with die 1 have already been described. The reverse found with die 3, which I have called 'of Richard II style', has, in the inner circle, the waisted type of lettering typical of the later groats of this reign, but the outer circle lettering is definitely abnormal, and includes a small 'M' very similar to 'M1' found on the Post-Treaty groats of Edward III, and the early groats of Richard II. The legend ending **EM.MEV**, followed by what looks like a curved contraction mark, is that of the normal late Richard II type IIIb. (Pl. VIII, 4.)

The other two reverses, which I have called 'transitional', found with dies 1 and 2 (Pl. VIII, 1, 3) are even more difficult to place. Here the legend ending is **M.MEVM** as on type I of the Henry IV reverses, but the 'M' used is neither the letter with the long centre bar characteristic of these dies, nor the plain 'M' of the late Richard II reverses, but is, in fact, the letter found on the reverses of the crescent groats, which, however, have the ending **EM.MEV**. It seems to me that these two reverses, like the obverse die no. 3, might have been made for Henry's heavy groat, but not used. Incidentally, on one of the two reverses the outer legend has been curiously blundered to read **POSVIID** with three 'I's following, the second in place of *z*, and the third turned into 'D' for **DEVM** by the use of a curved punch.

The new obverse dies specifically made for the light coinage are distinguished from the altered dies by the annulet and pellet beside the crown being reversed in position, and also by having the distinctive 'Henry IV' lettering already described. The first to appear were probably the curious types with even numbers of arches to the tressure and the name **HENRIC.DEI**, of which two forms are known, one with eight (Pl. VIII, 5) and the other with ten arches (Pl. VIII, 6). These two dies constitute my type II. I have found two specimens of the first-mentioned type, both from the same obverse and reverse dies, and five of the second, also all from the same dies, a very unusual circumstance which must have some special significance. The seven coins are as follows:

II. *Die 1*—8 arches to tressure, bust similar to I-1, but low crown with narrow band.

Rev. H. IV die I-1 (2 coins: FAW-I 241 = II 240 = RCL 1378, now DM; and CEB). (Pl. VIII, 5.)

Die 2—10 arches to tressure, bust similar to die 1, but normal crown.

Rev. H. IV die II-2 (5 coins: FAW-I 239 = RCL 3072; Huth 305 now CEB; RCB; DM and BM). (Pl. VIII, 6.)

I have placed the 8-arch coins as the earlier of the two types, as they have a reverse with trefoil before **UON** and legend ending **M:MEVM**, not found with any other groat, and which as already explained I have called type I, whereas the 10-arch coins have a reverse of type II as also found with later obverses.

The bulk of the issue of light groats was made from normal dies having 9 arches, and the name **HENRIC.DI**, and these form type III. I have noted

six of these dies, having a rather thin face and sparse curls, set somewhat wide of the cheeks. One has the pellet above the right-hand lis of the crown instead of beside it, due to lack of room on the die, and the legend ending **RRANC** (Pl. VIII, 7, 8). The other five have the pellet normally placed and a slipped trefoil at the end of the legend. There are minor variations of stop and legend to differentiate them, and in placing them in order I have had recourse to the reverses found with them. I might add that dies 4 and 6 show very slipshod and careless work, no. 4 (Pl. VIII, 11) having a badly misplaced crown, and no. 6 (Pl. VIII, 12) irregularly arranged tressure arches giving the impression of an even number, when, in fact, there are the normal nine.

Here is a detailed list of the twenty-two specimens I have noted:

III. *Die 1*—**RRANC**, pellet over right-hand lis of crown.

Rev. 1: H. IV die III-1 (4 coins: FAW-I 242 = FAW-II 242 = RCL 1379; CEB; and BM-2). (Pl. VIII, 7.)

Rev. 2: H. V die Ib (BM).

Rev. 3: H. V die Id (3 coins: FAW-I 247 now BM; RCB now DM; and CEB).

Rev. 4: H. V die Ic, curious thin letters (BM ex LAL). (Pl. VIII, 8.)

Die 2—**RRANC**✠. (Also known with mullet added to breast for H. V).

Rev. 1: H. IV die II-2 (2 coins: BM; RCL 3999).

Rev. 2: H. IV die II-3 (CEB). (Pl. VIII, 9.)

Die 3—**RRANC**✠, poor style.

Rev.: H. V type III (RCB now DM). (Pl. VIII, 10.)

Die 4—**RRANC**✠.

Rev. 1: H. IV die III-2 (2 coins: BM; DM). (Pl. VIII, 11.)

Rev. 2: H. V die If (Bruun 376 = Roth-II 184 = FAW-II 243 = RCL 1387).

Rev. 3: H. V die type III (3 coins: BM-2; CEB).

Die 5—**RRANC**✠ (Flaw in die cutting through right-hand fleur above crown).

Rev. 1: H. IV die III-3 (Glenluce hoard).

Rev. 2: H. V type III (FAW-I 250).

Die 6—**FRANCIE**✠.

Rev.: H. V type III (FAW-I 248 now BM). (Pl. VIII, 12.)

It will be noticed that only four of the six dies are found with Henry IV reverses, but all except no. 2 are known with the new style reverses. In other words, of the twenty-two specimens of type III, less than half have Henry IV reverses. It has already been suggested that the new style represented the result of the order of 22 September 1412 to obtain moneys and engravers, and it seems to me that the use of the new reverses with so many of the Henry IV obverses does at least suggest that they were not dies prepared for a new reign. The normal muling one might expect between the two reigns would surely be the use of any surviving reverses with new type obverses.

2. *Half-groats*. There are not many more light half-groats known than there are heavies; in fact, I have noted ten from two obverse and six reverse dies. One of the obverses has the pellet to left and annulet to right of the crown, and the king's name: **HENRIC.DEI**, and though it does not exactly correspond to the groats of that type, I have classified it as type I. The other obverse die has the marks reversed in position and the name **HENRIC.DI**, equivalent to the groats of type III and I have classified it accordingly. Both, of course, have the typical 'Henry IV' lettering.

The six reverse dies are immediately distinguished from those of the heavy half-groats by the Lombardic instead of Roman 'N' in **UONDON**. They show a different picture from the groat reverses, as only one of the six is of the new style. The five Henry IV reverses all have different outer legends, and may be divided into three types. The first, represented by one of the two dies found with obverse die no. 1, is of rather careless style and the legend is unusually divided, ending **OREMM** with single saltire stops as against the normal double saltires. The second consists of two reverses, one found with obverse die no. 1 and one with die no. 2. These are of good style, and have similar endings to those of the groats, viz. **EM.MEV(M)**. The reverse found with obverse no. 2 is unusual in lacking the initial cross before **POSVI**, and in having a slipped trefoil after **DON**, the only instance of the use of this mark in any half-groat legend. The third type also consists of two reverses, both found with obverse no. 2. They have the new form of legend ending: **RE.MEV**. All these dies have the 'Henry IV' lettering. Finally the sixth reverse is represented by two coins which are mules with the new reign coinage, having the new style and lettering of Henry V Type III. There is no initial cross and the legend ends **RE.ME** in the normal way.

Here is a detailed list of the ten half-groats:

- I. Similar bust to heavy half-groat, * / o either side of crown and slipped trefoil on breast. Lettering as groats type II.

Die 1—**HENRIC:DEI:GRA:REX:ANGL:Z:R.**

Rev. 1: ***POS/VI:DEV/ADIVT*/OREMM**. (FAW-I 252, now BM.)

Rev. 2: ***POSVI:DEVM*/AD:IVTOR/EM:MEVM, *UON/DON**. (RCB; BM). (Pl. X, 2.)

- III. Bust similar to I, o / * either side of crown, slipped trefoil on breast. Lettering as I.

Die 2—**HENRIC:DI:GRA:REX:ANGL:Z:R.**

Rev. 3: ***POSVI/DEVM:*/D:IVTOR/EM:MEV, UON/DON+**. (RCB; CEB; BM). (Pl. X, 3.)

Rev. 4: ***POSVI/DEVM:*/D:IVTO/RE:MEV**. (RCB now DM.)

Rev. 5: ***POSVI/DEVM:*/ADIVTO/RE:MEV**. (BM.)

Rev. 6: **POSVI/DEV:*/DIVTO/RE:ME** = H.V, type III (FAW-I 251 = RCL 1388 now DM; and BM).

3. *Small silver*. The small silver of the light coinage, with obverses having Henry IV type lettering, is even scarcer than the corresponding heavy coinage, which would seem to confirm that in the latter case a greater proportion of the available bullion was struck into the smaller coins, especially halfpennies, as the total weight of the two coinages is not greatly different.

I have actually been able to trace seven light pennies probably from five different dies, the condition and size of the coins making exact identification extremely difficult. In this case I think they may be divided into the same three types as the groats. What is undoubtedly the first die, forming type I, has only recently come to light (**Pl. X, 12**) (Seaby). It has the pellet to left and an annulet, though flattened to a large pellet, on the right of the crown. It has the legend: **HENRIC.REX.ANGLIE**, and a bust similar to that of the heavy pennies, though in place of the star on the breast it has the slipped trefoil, a distinguishing mark of the light coinage. The lettering also is different, the letter 'G' in particular being round as opposed to the distinctive heavy form or the lozenge-shape of the true Henry IV light type. The reverse has Lombardic 'N's in **ΛONDON** and is identical in style to those found on three of the four heavy pennies with this feature, though not on what I have assumed to be the latest.

Type II consists of three pennies from two dies having the annulet to left and pellet to right of the crown, a large bust with short neck and long hair and slipped trefoil on the breast as before. The two dies are distinguished first by their legends, die 2 reading: **HENRIC.REX.ANGLIE** as on die 1, and die 3 reading: **HENRIC.DI.GRA.REX.ANGLI**, and secondly by the lettering, die 2 having the round letters of die 1, and die 3 the true Henry IV light lettering. The reverses of the three coins all have reverse-barred Roman 'N's in **ΛONDON** in contra-distinction to the half-groats of type II which, of course, have Lombardic 'N's.

Finally, type III is made up of three pennies from dies 4 and 5, having the **REX.ANGLIE** legend, annulet and pellet and lettering as die 3 and a small bust with short hair recalling that of type I. The reverses, though from different dies, are almost identical, having Roman 'N's in **ΛONDON** and slipped trefoil before **CIVITAS**. I have placed these two dies last as the pellet to the right of the crown on no. 4 was later over-struck with a mullet for use under Henry V, as was that on a third die of similar style which, however, I have not yet found used without the mullet (**Pl. X, 15**). Three pennies are known from these two altered dies with Henry V reverses, and will be found noted in the appropriate section.

Here is a detailed list of the light pennies:

- I. *Die 1*—**HENRIC.REX.ANGLIE**, \bullet/\circ by crown, small bust as heavy pennies, round lettering, slipped trefoil on breast.
Rev. **CIVITAS.ΛONDON**, lettering similar to H. IV heavy or late R. II. (**Pl. X. 12.**)
- II. *Die 2*—**HENRIC.REX.ANGLIE**, \circ/\bullet by crown, large bust with short neck and long hair, slipped trefoil on breast, letters as I.
Rev. **CIVITAS. ΛOIIDON**, H. IV letters (Talbot-Ready 385 now BM). (**Pl. X. 13.**)
- Die 3*—**HENRIC.DI.GRA.REX.ANGLI**, \circ/\bullet by crown, bust as die 2, H. IV light lettering, slipped trefoil on breast.
Rev. 1—**CIVITAS.ΛONDON**.? (FAW pl. xiii. 5).
Rev. 2—**✠CIVITAS.ΛOHDOII**. (LAL 587.)

III. *Die 4*—**HENRIC.REX.ANGLIE**, o/* by crown, bust similar to die 1, lettering as die 3, slipped trefoil on breast.

Rev. ♣**CIVITAS.LONDON**. (FAW-I 253 = RCL 1380; and FAW pl. xiii. 8 at BM). (**Pl. X. 14.**) (Also known with mullet struck over the pellet for use under Henry V.)

Die 5—Obverse and reverse very similar to pennies of die 4 (CEB).

The halfpennies are only a little more plentiful than the pennies. They all have the English title only, and the earliest are probably those with no mark in the field (see RCL 1382/3). Among the others with varied busts are examples with annulets (**Pl. X, 21**) whole or broken beside the neck or beside the crown. The 'N's in **LONDON** are usually Lombardic, but in the B.M. collection is one specimen with a reversed Roman 'N' in **NON**.

There were apparently two farthings with the name **HENRIC** in the Highbury find, which was deposited round about 1420, and is the chief source of the small silver of this reign. They are very similar in style, having a crowned head only, and the English title. One weighed $4\frac{1}{2}$ gr. and the other $3\frac{3}{4}$ gr. If any others have since been identified I have found no note of them.

PART III. HENRY V

When Henry V came to the throne on 20 March 1413, the new coinage of Henry IV had been appearing for some months, but a new mintmaster, Ludovic or Lewis John, had only just taken office in succession to Richard Garner, who had been appointed in November 1411 to handle the light coinage authorized in that month.

This new coinage, that is, the pre-mullet coinage with the 'emaciated' and 'scowling' bust types, was not described in my article on Henry IV as it is normally considered as being the first issue of Henry V, following Dr. Brooke, and I am preserving this arrangement for convenience sake. Nevertheless I would like to repeat my firm conviction that the mullet was Henry V's distinguishing emblem, and that his first coins were struck from Henry IV dies of old and new styles, on which a mullet was added or struck over his father's emblems.

We have, in fact, one groat die of Henry IV old type III, and two, possibly four, groat dies of his new coinage, with mullet added to the breast. There are also penny and halfpenny dies of Henry IV's light coinage and a penny die of the 'emaciated' type, all with a mullet struck over the pellet by the crown. Henry V's definitive issue with a mullet incorporated in the design followed as soon as the dies could be prepared, and as already mentioned is quite distinctive in style, with a new bust on all denominations which may well be attributed to the new mintmaster. The fact that the mullet was not actually used subsequently on the halfpennies but was replaced by a broken annulet was no doubt due to the size of the emblem being too great for the small flan, and does not invalidate the argument.

I can think of no emergency other than the accession of a new king which would make necessary the addition of such a distinguishing mark to old dies,

and especially a mark which was used subsequently on all denominations but the halfpenny throughout almost the whole of the new reign, and was therefore not a privy mark in the normal sense.

The silver issues of the new reign, according to the bullion returns published by Miss E. Stokes, show marked activity during the first four years covering the king's first French campaign, followed by five years of more normal issues when the average was something under 1,500 lb. per annum. Here are the figures covering also the beginning of the light coinage under Henry IV:

1 yr. 29.11.1411-29.11.1412	1,941 lb.
1 „ 30.11.1412-29.9.1413	3,642 „
4 yrs. 30.9.1413-29.9.1417	18,713 „
1½ „ 30.9.1417-31.3.1419	2,105 „
1½ „ 1.4.1419-29.9.1420	1,480 „
1½ „ 30.9.1420-31.3.1422	2,217 „
	<hr/> <hr/> 30,098 lb.

The presently accepted classifications of the coins of Henry V, in fact the only ones so far published, are the two provided by Dr. Brooke. The first, in his work already referred to in the paper on Henry IV—‘The Privy Marks in the Reign of Henry V’, is a rather complicated affair dependent chiefly on the recognition of minor modifications of lettering, due to the purpose for which it was compiled. The second, which appears in his general history of the coinage, *English Coins*, is a much simplified version, and it is this latter which is usually employed.

Both these classifications, but especially that given in the ‘Privy Marks’, were prepared from the nobles and halves, based on the important find of these coins made at Horsted Keynes in 1929 and at Borth in the following year, and their application to the silver is not, in my opinion, entirely successful. Although there is generally some correspondence between the periodic changes of design, style, lettering, and marks on the gold and silver moneys, all my experience in the study of the medieval hammered coinage has led me to believe that it is dangerous to rely too much on apparent similarities for classification.

For one thing there is rarely any equivalent in the gold of the busts found on the silver, which represent a major class distinction. In the particular case of Henry V's coinage also, there is no equivalent on the groats of the many added emblems such as pellets, annulets, and trefoils in different positions which form several of the classes on the gold money, though some of these can be found on the smaller silver denominations.

A particular illustration of the divergence in the marking of gold and silver in this reign is most clearly seen in the full classification, where two important classes in the gold, viz. VII and VIII, are represented in the groats and halves by coins from only one obverse die of each denomination. As gold and silver, according to the bullion records, were struck throughout the reign in more or less parallel quantities, this seems to me a hardly credible situation.

The simplified classification which is most usually employed errs, I think, on the side of too much simplification. Also there are one or two weaknesses

in it to which attention may be directed. For one thing, in the case of the groats, making the presence or absence of the mullet the deciding factor as to whether a coin is of type B or C occasionally upsets the chronological order of dies, as some of the earlier groats which should be type B are found with mullet added, whereas later groats which should be type C are found without mullet. Also, for some reason, class G covering the latest coins with no marks, has been omitted for the groats though given for all other denominations.

As already indicated, the full classification of the 'Privy Marks' is primarily based on lettering differences which have been carefully analysed and arranged to support the main argument of the article, and nine classes numbered from I to IX have been recognized. These cover all the known types and varieties, and although identification relies so much on distinguishing minor varieties, I think that, with some rearrangement, the classification can be made to serve reasonably well the needs of the average collector as well as of the specialist.

My principal objections to it as it stands, which incidentally applies equally to the simplified version, is that only two busts are recognized on the groats, whereas there are in fact three, and the failure to recognize the third and most common bust has resulted in the last groat with the second bust and the first with the third being classified together in the same type (IV). Accordingly I have divided Brooke's type IV into two, placing the first section in my type III and the second, as I have taken type IV for the altered dies, in type V. I have also found it necessary to divide Brooke's type V into two parts, as it actually consists of two different forms of obverse, and this has necessitated utilizing Brooke's blank type VII. His type VIII and IX I have left untouched.

In view of the importance of the question of busts I would like to discuss it at some length. Dealing then first with the groats, the first bust is that which Dr. Brooke calls 'emaciated'. This name was, I think, originally used by Walters in his article on the coinage of Henry IV (*N.C.* 4/vi), where he applies it to a version of Brooke's 'ordinary' bust (Walters, pl. xv. 1). Brooke, however, transferred it to the very distinctive bust with the large head and short neck, which in the Walters sale (1913) had been called 'savage', and which was so called also in the Lockett catalogue (English sale II).

Though still used, the name 'emaciated' is often said to be inappropriate, but on the contrary I consider it most apt and descriptive of the expression depicted by the engraver. The effect of the sunken cheeks and the indentations in the lines of the face on either side just above the mouth is quite distinctive, and could not be more appropriately described than by the word 'emaciated', that is, gaunt and ascetic-looking.

As to the second bust, which Brooke calls 'ordinary', this is usually referred to as the 'scowling' bust, though I have not been able to trace the origin of this title. It differs from the first bust in not having the hollows across the cheeks or the indentations in the lines of the face. The mouth is less prominent and not so wide, but the turned-down corners make the term 'scowling' a convenient, if not entirely satisfactory, description. There are actually four versions of it, and all have the same rather bleak expression, except perhaps the third, and all have a smaller face and taller neck than

the 'emaciated' bust. The four are found on Brooke's full classification types as follows:

1. Small face with big eyes, weak chin (Br. II-1, 2),
2. Larger face, normal eyes, square chin (Br. II-3),
3. Oval face, youngish-looking (Br. III, all dies),
4. Similar to 2 but slightly longer and thinner face (Br. IV-1).

All subsequent coins, that is dies 2-4 of Br. type IV and all the dies of Brooke types V, VI, VIII, and IX, as well as the early groats of Henry VI, show the third bust. This has apparently escaped the notice of writers on these coins hitherto, yet it is quite as distinctive as the other two. Its chief feature is the deep, splayed lines on either side of the nose leading into the forehead, for which reason I suggest the title of 'frowning' bust, though actually the expression is reasonably pleasant and youthful on well-preserved specimens. On worn coins, however, and especially on those on which the reverse cross has made a line across the eyes, the expression tends to be somewhat grim and forbidding.

The occurrence of these three busts on the groats raises an interesting point as to the preparation of dies at this time. Until the mullet groats appeared it is uncommon to find two dies which could have been struck from the same bust punches. A dramatic change in the technique of die preparation took place with the adoption of the 'frowning' bust, however, for an almost complete identity of appearance exists in all the groats known from the large number of dies with this bust. This new and important method for the mass production of dies whatever it may have been was continued also in the following reign, when it was possible to turn out a very large coinage indeed from two mints with an almost perfect uniformity of appearance.

As regards the busts on the smaller denominations, it is curious that Brooke should have noted no less than five busts on the much rarer half-groats and six on the pennies while ignoring the third bust on the groats. I am including the five half-groat busts in my classification, but in the case of the pennies the differences between Brooke's busts nos. 2, 3, 4, and 5 are so slight that I am combining them into one, making a total of only three busts. For the halfpennies Brooke mentions only the first and last busts, and I have accordingly classed all the intermediate types under the heading of 'ordinary bust' as with the pennies.

This brings me to the second most important feature of the coins of this reign, and that is the lettering. I have criticized Brooke's full classification by lettering on the score of its complexity and the difficulty of recognizing many of the minor differences he has listed. Nevertheless, though not essential for the main divisions into classes, the modifications made to certain letters are often the only method of distinguishing sequences of dies, and it is necessary, therefore, to quote them.

To simplify matters as much as possible I have chosen the three most reliable and significant of the letters noted by Brooke, viz. 'I', 'N', and 'P'. The latter is found on reverses only so I have added the 'D', not mentioned by Brooke, as it is useful for distinguishing the coins of the two new classes into which I have divided Brooke's types IV, V, and VI. I would add that

there are only two distinctive alphabets to be found, the first being confined to the 'emaciated bust' issue. In the second alphabet there were undoubtedly a large number of modifications made to individual letters, but whether or not this was done solely or even primarily for privy purposes, Dr. Brooke has certainly demonstrated that they show a sequence of dies.

There is one further point to discuss before describing the individual coins according to my proposed classification, and that is the question of the dividing line between the coins of Henry V and Henry VI. In this inquiry I propose to confine myself to the groats as only on these is it possible to show the full sequence of transformation from the coins of one reign to those of the next. For the other denominations a note of the known mules will be given.

Covering the transitional period then we have three main types of groat, viz.

1. *Obv.* Square-armed cross, no mullet. *Rev.* Plain. (No annulets.)
2. *Obv.* as 1. *Rev.* Annulets after **POSVI** and in two quarters.
3. *Obv.* Cross with curved arms. *Rev.* as 2,

and these are known from three mints as follows: London—types 1, 2, and 3, Calais—types 2 and 3, and York—type 3. Walters writing in 1906 attributed to Henry V all the coins with the square-armed cross, and to Henry V those having the cross with curved arms. This, of course, gave to Henry V the groats of type 2 with annulets on the reverse, which included some Calais groats which have annulets also on the obverse.

This situation was acceptable at that time but subsequently the annulet came to be accepted as the distinguishing mark of Henry VI's first coinage. The key to the puzzle lay in the output of the Calais mint. This mint had been authorized to commence coining in the last indenture of Henry V's reign, that of 13 February 1422 with Bartholomew Goldbeter, which instructed him to begin coining at 'la ville de Caleys' in addition to the Tower. Subsequent evidence, however (see Brooke: 'The Borth Find of Nobles'—*N.C.* 5/xi), has shown that this mint was engaged only on the gold coinage during its first year, and that the striking of silver could not have been begun there until early in 1423 or several months after Henry V's death.

The way in which the annulet was shown to be almost certainly the emblem chosen to distinguish the coins of the third king in succession to bear the name of Henry, is set out very clearly in the articles by the late Mr. Whitton in the *B.N.J.*, xxiii, pts. i and ii, although he does not specifically draw this conclusion from his facts. Mr. Whitton has identified four types of 'N' on the annulet coins of which his N1 is equivalent to Brooke's N8 and my N9. Combining Brooke's last type of Henry V with these types of Whitton's we can expand the previous list of transitional types as follows:

1. *Obv.* Square cross, N1. *Rev.* Plain, N1—London.
- 2 (a) ,, N2. *Rev.* Annulets, N1—London.
- (b) ,, N2. ,, N2—London.
- (c) ,, N3. ,, N3—London, Calais.
- (d) ,, N4. ,, N4—London, Calais.
3. *Obv.* Curved cross, N4. *Rev.* Annulets, N4—London, Calais, York.

It is not necessary to illustrate these 'N's, which are only quoted to show the evidence available for the sequence of types.

It now remains to show how these types are to be divided up to cover the transitional period between the two reigns and demonstrate the validity of the foregoing argument. This involves a consideration of four available dates of this period, i.e.:

1. The Goldbeter indenture—13 February 1422.
2. The death of Henry V—3 August 1422.
3. The opening of the Calais silver issues, say February 1423.
4. The opening of the York mint, say August 1423.

As to this last point which has not yet been mentioned, the surviving accounts of the York mint cover the period August 1423 to August 1424, and independent evidence shows that the active period for the production of silver was the summer of 1423.

Now the rare groats of type 1, i.e. without mullet or any mark on the reverse, can be attributed to the six months between the signing of the Goldbeter indenture and the death of Henry V. The groats of types 2a and 2b, that is with the annulet reverse, having N2 on the obverse and N1 or N2 on the reverse, which are of similar rarity, then fill the succeeding six months or so before the opening of the Calais mint for silver. The first issues of Calais with N3 and N4 on the obverse and reverse, i.e. types 2c and 2d, also rare, obviously follow for the next six months, and finally we have the groats with the new initial cross and N4 on both sides appearing contemporaneously with the opening of the York mint in the summer of 1423.

As to mules between the two reigns, I know of no genuine groat mule. The coin sold as such under Lot 1427 in the Lockett sale no. II was actually an early Henry VI groat of type 2b. A genuine mule would presumably have an obverse of type 1 and a reverse of type 2a (or 2b), that is, with N1 on both sides and annulets on the reverse. Two half-groat mules are known with Henry VI reverses having annulets, and two halfpenny mules, one with an obverse and the other with a reverse of Henry VI.

Now to describe the coins which come under my proposed amended classification. I have divided these into two sections. A. The coins which I consider to have been struck by Henry IV, but which by general usage are classified under Henry V, together with the few altered dies and transitional coins before the definitive issues, and B. The definitive issues making up the bulk of the silver coinage of the reign.

A. *Henry IV/Henry V*. The two obverse groat dies of type I were obviously prepared from the same punches as they are almost identical, the only difference being in the stops after DI—no. 1 (Pl. IX, 1) has a single saltire and no. 2 (Pl. IX, 2) double saltires. The large face with negroid lips and short neck constituting the 'emaciated' bust is very distinctive, as are also the short, broad letters. Coins from these two dies are rare, and I have noted only four from die 1 and eight from die 2. Six reverse dies are found with type 1 lettering, which would be the normal number made for the two obverse dies, but only three of these are found actually used with them. The others are found with earlier Henry IV obverses. There are, in fact, only five true coins of this type

known, two from die 1 and three from die 2. The other seven groats with type 1 obverses have either later reverses of types II and III (5) or reverses of Henry IV (2).

The half-groats with the 'emaciated' bust also come from two obverse dies, both having nine arches to the tressure and no fleurs over the crown. In this case, however, die 1 is distinguished by having the Henry IV privy marks of an annulet to left and pellet to right of the crown (Pl. X, 4), a fact which has already been cited as strong evidence that this type was actually struck for Henry IV and not Henry V. These coins are rarer than the groats; I have, in fact, noted only four—three of die 1 and one only of die 2. These have three different reverses of the same type and one reverse of type II. The pennies with the distinctive bust and lettering of type I follow die 1 of the halves in having annulet to right and pellet to left of the crown (Pl. X, 16), while the halfpennies have annulets either side of the crown. Both denominations are very rare.

II. The two dies of the 'scowling' bust no. 1 forming type IIa (dies II-1, 2, Pl. IX, 3, 4) are the only other groat dies having fleurs above the crown, and undoubtedly follow the two dies of type I, both of which have the fleurs. They are the first dies to have the taller lettering which was preserved with modifications throughout the rest of the reign of Henry V, and they are distinguished from the succeeding dies by being the only ones with both IIa and N2. I have traced five specimens from each of these two dies, one of each having a reverse of the same type, and the other reverses of the succeeding type III. The two reverses mentioned of type II are from the same die, but two other type II reverses are known used with the obverse die II-3 (Pl. IX, 5). This is the only other die known with IIa, but it has a new 'N', N2a, and I have therefore classified it as type IIb. It has a rather different bust and no fleurs above the crown, though in other respects it closely resembles the two dies of type IIa. Of this die I have traced seven coins, four with reverses of type III.

Of the other denominations having similar letters to these sub-types one half-groat reverse die only has so far been noted. It has an obverse from die I-1.

III. There are four dies with the third variety of 'scowling' bust and lettering which latter now includes a new I, I2. I have numbered these 4-7, and they form type III, from which about eight coins are known. The full complement of 12 reverses with the same lettering are known, and these are found also with obverses of types II and IV. One reverse of type II is found with obverse III-4. Die III-7 is illustrated (Pl. IX, 6).

In the smaller denominations one obverse half-groat die is known with lettering I2 and N2a (Pl. X, 5). It has a bust and crown very similar to those of type I without the 'emaciated' features. There are ten arches to the tressure and nothing appears by the crown. Two reverses to match the obverse are also known, one being found used with it and the other with a die of Henry IV.

IV. If my theory as to the use of the mullet is correct, the death of Henry IV must have occurred while type III was current, as two of the groat dies of this type, i.e. 5 and 7, are known used subsequently with a mullet struck in on the right breast. Two further dies of identical style and lettering are known

only with the mullet on the right breast, and quite possibly they were never used without it. I have numbered them 8 and 9 (Pl. IX, 7). These four altered dies, with the addition of the one known Henry IV die with mullet added (HIV III-2), make up my type IV for the groats, and I know of six coins only from the five dies, the reverses consisting of three each of types III and V.

No half-groat die is known with mullet added, but Brooke lists one of the type I penny dies, i.e. that ending **AN**G, with a mullet struck over the pellet to the right of the crown, and one halfpenny die of Henry IV, with annulets either side of the crown, and a mullet struck over the one to the right. In addition there are the two Henry IV penny dies already mentioned with mullet struck over the pellet, from which three coins are known.

V. The solitary die forming type V of the groats has a tall bust of 'scowling' type, but lettering as on the first dies of the next type with the 'frowning' bust, that is with N2a, tall 'I' (I3) and tall 'C' and 'E' (Pl. IX, 8). This die has the mullet on the breast cusp, the only known case of a mullet in this position on the groats. It has been suggested that the mullet in this case might have been stamped over the breast fleur of a plain die, but I have been unable to trace any coins from such a die, and indeed it seems most unlikely to have existed. I think it probable that it is, as Brooke says, the first die made with the mullet incorporated, and sited in the most obvious place, the centre of the breast, as on the halves. The emergency decision to convert old groat dies which already had a fleur in this position then made it necessary for the mullet to be placed on the right breast, and subsequent dies were made in the same way for the sake of uniformity. This last die of the 'scowling bust' series I have numbered 10.

I have traced no less than seven coins from this die, the reverses of which come from my types V and VIa and none from any earlier types, which confirms its position in the general sequence. In the smaller denominations, as in type III, only one obverse and two reverse half-groat dies are known with N2a and the large 'C', 'E', and 'I' (I3). The obverse has a bust approximating to that of type III, and surprisingly has annulet to left and pellet to right of the crown with mullet on the breast (Pl. X, 6), which would seem to confirm that the latter is an addition to the die. One of the reverses is found used with the obverse, and the other with a die of type VI.

This completes the tale of the coins which I have classified under the heading of Henry IV/Henry V. The following four classes with the third or 'frowning' bust represent Henry V's definitive issues and, apart from the many further modifications of individual letters, they show, as already mentioned, a very large measure of uniformity in style and design. Here is my summary of the first section of Henry V's silver issues, with a note of where illustrations of some of the dies may be found.

A. HENRY IV/HENRY V

I. EMACIATED BUST, letters: II, D1, N1.

Groats: Fleurs over crown, quatrefoil after **HENRIC**,

Die 1—**DI*** = Br. I-1 (FAW-I 243 = RCL 1390). *Rev.* HIV-III, HV-I,

Die 2—**DI*** = Br. I-2 (FAW-I 244, RCL 1391). *Rev.* I, II, III, VIb.

Half-groats: 9 arches to tressure, no fleurs over crown,

Die 1—**HENRIC DI GRÆ**, o/* by crown (FAW-I 261, RCL 1392). *Rev.* II, I,

Die 2—**HENRIC DI GRÆ**, nothing by crown. *Rev.* I.

Pennies: o/* by crown, ends **ANGL** or **ANG**. *Rev.* I, ann. before **LION**. (FAW-I 263, RCL 1381.)

Halfpennies: o/o by crown.

II. SCOWLING BUST nos. 1 and 2

Groats:

(a) *Bust no. 1*, fleurs over crown, quatrefoil after **HENRIC**, letters: I1a, D2, N2.

Die 1—**FRANC** = Br. II-1 (FAW-I 259 = RCL 1394). *Rev.* II, III.

Die 2—**FRANC** = Br. II-2 (FAW-I 246 = RCL 1395). *Rev.* II, III.

(b) *Bust No. 2*, no fleurs over crown, no quatrefoil after **HENRIC**, letters: I1a, D2, N2a.

Die 3—**FRANC** = Br. II-3 (FAW-I 249, RCL 1396). *Rev.* II, III.

Half-groats: One reverse die only known with *obv.* I-1.

III. SCOWLING BUST no. 3, letters: I2, D2, N2a.

Groats: No fleurs over crown, usually no quatrefoil after **HENRIC**.

Dies 4/7—Br. III-1/4, No. 3 has quatrefoil. *Rev.* II, III.

Half-groats: One obverse die, 10 arches to tressure, nothing by crown. *Rev.* III.

IV. OLD DIES WITH MULLET ADDED:

Groats:

(a) Die of Henry IV (III-2) (RCL 1386) with mullet added to right breast. *Rev.* III.

(b) Dies of III with mullet added to right breast:

Dies 5 and 7—Br. III-2, 4 (FAW-I 278 = Br. III-4). *Rev.* III, V.

Dies 8 and 9—Br. III-5, 6, not known without mullet, both have quatrefoil after **HENRIC** (RCL 1406 = Br. III-6). *Rev.* III, V.

Pennies:

(a) Die 4 of Henry IV with mullet punched over pellet. *Rev.* type III.

Also another similar, die not known used without the mullet. (FAW-I 264, RCL 1389.)

(b) Die of type I with **ANG**, mullet punched over pellet.

Halfpenny: Die of Henry IV with o/o by crown and mullet punched in over annulet to right of crown.

V. SCOWLING BUST no. 4, letters: I3, D2, N2a.—large 'C' and 'E'.

Groat: Mullet on breast cusp, **ANGLIE.S.FRAN.**

Die 10—Br. IV-1. *Rev.* V, VIa.

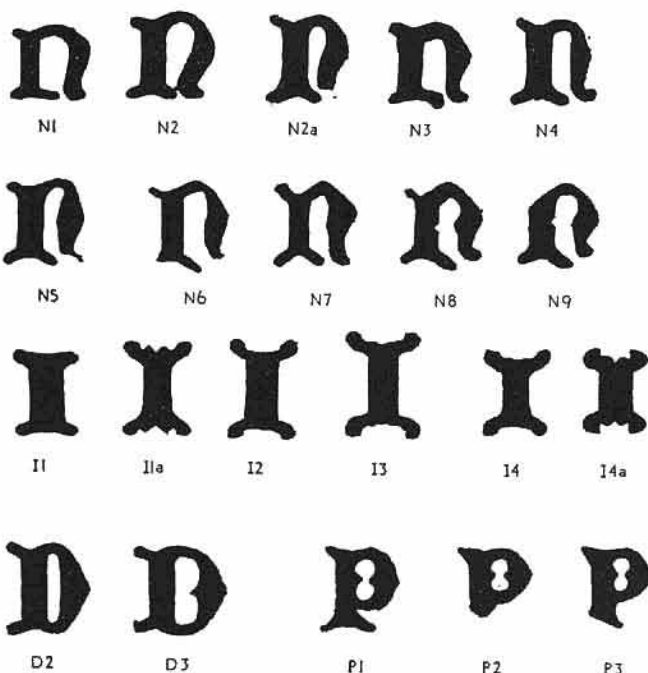
Half-groat: One obverse die, bust as type III, mullet on breast, o/* by crown. *Rev.* V.

B. Henry V Definitive issues. As already stated, the definitive issues of Henry V with the mullet as distinguishing mark are characterized on all denominations by new busts, standardized on the groats for some years to come but varying on the smaller denominations. Full details of the latter will be found in the summary at the end. In this section I propose to deal separately with each denomination.

Groats. My two main classes of definitives, VI and VII, represent a rather different method of division from that adopted by Brooke. These earlier

groats of Brooke's types IV, V, and VI, which all have the 'frowning' bust, seem to me to fall naturally into two classes. The first, my class VI (Br. IV-2/4 and Va, c-e, h-m, q, r), has D2, an initial cross with pellet centre and a quatrefoil after **HENRIC**, as on the earlier classes (**Pl. IX, 9**). The second, my class VII (Br. Vs, Vt and VI), has D3, a new initial cross with sunk or plain centre and no quatrefoil. In this latter I have had to subdivide Brooke's class VI, as about half of the groats of this class which I have examined have a reverse of his type Vt (i.e. N7 and P1); only half in fact have a reverse of the type which he has classified as VI.

Henry V



All these groats are reasonably common, except for the special varieties such as the two odd dies without mullet on the breast, and the spelling varieties: **HENRC**, **FRANCE**, **LONDOS**, &c. (**Pl. IX, 10**) as they represent the great bulk of the silver coinage of the reign.

Groats of the two remaining classes are rare. Those of class VIII, from a single die, are recognizable by the legend ending **FRANCIE** (**Pl. IX, 11**) and of course the letter N9 coupled with the mullet which still appears on the right breast. There are three specimens of this type in the B.M. collection, and I have failed to trace any others. The reverses of this class are more common as they were used also for the last class—IX. The obverses of this latter differ from that of type VIII only in having the normal legend ending **FRANC**, and no mullet on the breast (**Pl. IX, 12**). Brooke lists two specimens from one obverse die, but there are now four in the B.M. collection, and I have one from a different die.

I think I should mention here the contemporary forgeries which exist of the groats with mullet on the breast. These are reasonably well executed copies of the early definitive issues. The busts and lettering, of course, present many points of difference from the regular series, the former resembling more the groats of type II. I have two specimens from different obverse and reverse dies, and another from one of the obverse dies but with a third reverse is illustrated in the Lockett sale catalogue, pt. iv, no. 4003.

The undoubted skill evident in the production of these forgeries and the fact that three specimens at least have survived, argues a well-organized counterfeiting establishment, which must have had facilities which could not have escaped the notice of the authorities if they had been available in England. A similar series of forgeries exists for the first reign of Edward IV, and in this case also a Continental source is suspected.

Half-groats. The summary gives in detail the characteristics of the various busts which distinguish the four late types of half-groats. There is no equivalent in the halves of the three Brooke type IV dies which occupy the first subsection (a) of class VII of the groats, but I have placed here what must be the earliest known half-groat obverse die of Brooke type V, which, though having the new tall bust and N3, still retains the old lower and plainer crown, and has no mullet on the breast nor broken annulet by the crown, which latter is a special feature of all other dies of this and the succeeding class of halves. One die of class VIIa has the broken annulets on each side of the crown. I have illustrated a normal class VII coin (Pl. X, 8).

Two very unusual half-groats noted by Brooke are to be found in the British Museum and Ashmolean Museum collections. These have an obverse die of class VI(c), (Br. Vd-i), and a reverse from an early Richard II die of type IIa (Pl. X, 7). This is not quite such an extraordinary occurrence as the Richard II half-groats with Edward III obverses, as in this case the more important obverse die is contemporary. Nevertheless, the use of a thirty-year-old reverse die is sufficiently unusual, and would seem to indicate that the reverses at this time could not have borne any mark of privy significance. Unfortunately I have failed to trace the use of this die in Richard's reign.

Type VIII of the halves is distinguished by new emblems by the crown, namely annulet/trefoil (Pl. X, 9). As with the groats, only one obverse die has been noted, and four coins from it are listed by Brooke. All have reverses of my class VII. Type IX on the other hand, distinguished by the absence of any emblem on the breast or by the crown, is more common (Pl. X, 10). Brooke lists two dies and nine coins from them. The second obverse die, known only in mule form with Henry VI reverses, has a new form of I (I5), not illustrated, but plain with curved-in sides. The reverses found with these coins are immediately recognizable as the pellets are small and well separated, instead of being attached to one another in 'propeller' form as with the previous classes. They are found with both types of I, I4a, and I5.

Pennies and halfpennies. These small coins, usually poorly preserved and consequently difficult to classify, follow similar courses in classes VI (Pl. X, 17) to VIII (Pl. X, 18). All the necessary details of bust, emblems, and lettering are given in the summary which follows. As regards class IX, the pennies

have the same bust as the half-groats (**Pl. X, 19**) but in the case of the half-pennies no true coin is known, only two mules, one with an obverse and the other with a reverse of Henry V.

Farthings. It is not possible to allot the few known farthings to the various classes by letter or bust differences. Brooke writes: 'The little that is visible of the lettering on most farthings differs from that of the larger coins.'

Here is my detailed summary of the second section of Henry V's silver:

B. HENRY V DEFINITIVE ISSUES

VI. *Frowning Bust, type 1, D2*, initial cross with pellet centre, quatrefoil after **HENRIC**, mullet on right breast.

(a) *Obv.* and *Rev.* N2a **ANGLI** (Br. IV-2), **ANGLIE** (Br. IV-3, 4).

(b) *Obv.* N3. (Br. Va) (5 dies, only 1 with mullet). *Rev.* N3 (Va), N4 (Vc-e).

(c) *Obv.* N5. (Br. Vj-1, k-m). *Rev.* N4, 5, P2 (Br. Vh, i, j, k), N5, 6, P1 (Br. Vm, q, r).

VII. *Frowning Bust, type 2, D3*, initial cross with sunk centre, no quatrefoil after **HENRIC**, mullet on right breast.

(a) *Obv.* N6, I4 (Br. Vs). *Rev.* N6, P1 (Br. Vs).

(b) *Obv.* N7, I4a (Br. VI). *Rev.* N7, P1 (Br. Vt).

(c) *Obv.* N8, I4a (Br. VI) (One die no mullet, one **HENRC, FRANCE**). *Rev.* N8, P3 (Br. VI) (One die has **LONDOS**).

VIII. *Frowning Bust as type VII*, mullet on right breast, ends **FRANIE**.

Obv. N9, I4a (1 die) (Br. VIII). *Rev.* N9, P3 (5 dies, Br. VIII).

IX. *Bust as type VIII*, no mullet, ends **FRANC**.

Obv. N9, I4a (2 dies) (Br. IX). *Rev.* as type VIII.

HALF-GROATS:

VI. *Bust with tall neck* and crown, neck has central swelling, initial cross with pellet centre, D2, broken annulet to left of crown, mullet on centre of breast, quatrefoil after **POSVI**.

(a) *Obv.* N3. (Br. Va) (1 die with old crown and no mullet on breast or annulet to left of crown). *Rev.* N3 (Br. IV).

(b) *Obv.* N3. (Br. Va.) (3 dies, no. 1 with new crown, no mullet on breast, nos. 2 and 3, new crown, mullet on breast). *Rev.* N3 (Br. Va), N4 (Br. Vc-e).

(c) *Obv.* N4, 5, 6. (Br. Vd-i, j-m, q) (11 or 12 arches to tressure, with or without mullet). *Rev.* N4, 5, 6, P1, 2, I3, 4 (Br. Vf, j, k, l, m, p, q).

VII. *Bust with shorter neck*, spread shoulders, initial cross with sunk centre, broken annulet and mullet as before, D3.

(a) *Obv.* N6. (Br. Vs). (1 die **ANGLI** has broken annulet both sides of crown). *Rev.* N7, P2 (Br. Vt).

(b) *Obv.* N7 (Br. VI), (3 dies noted, only one with broken annulet). *Rev.* N7, P3 (Br. VI).

VIII. *Bust as type VI*, annulet to left, trefoil to right of crown, mullet on breast.

Obv. N7 (Br. VIII) (1 die). *Rev.* N7, P3 as VIIb (Br. VI).

IX. *New neat bust*, line beneath, hollows by armpits and below neck, narrow shoulders, no emblems. *Rev.* Normal separate pellets.

(a) *Obv.* I4a (Br. IXa) (4 dies). *Rev.* I4a, I5, P1 (Br. IX).

(b) *Obv.* I5 (Br. IXb) (1 die noted, only known with Hen. VI *rev.*).

PENNIES:

VI. *Smiling Bust* with large crown, initial cross with pellet centre, mullet to left, broken annulet to right of crown.

(b) *Obv.* N3, fish-tail I (Br. Va). *Rev.* N3 (Va), N4 (Vd-i).

(c) *Obv.* N4, I3 (Br. Vd-i), N6, I4 (Br. Vs). *Rev.* N4 (Br. Vd-i), N5 (Br. Vj-m), N6 (Br. Vs).

VII. *Bust as VI*, initial cross with sunk centre, mullet to left, annulet to right of crown.

Obv. and *Rev.* N7, I4 (Br. VI).

VIII. *Bust as VI*, mullet to left, trefoil to right of crown.

Obv. and *Rev.* N7, I4 (Br. VIII).

IX. *New Bust* with hollows by armpits and neck as halves, smaller crown, no emblems.

Obv. and *Rev.* N7, I4 (Br. IX).

HALFPENNIES:

VI. *Ordinary Bust*, broken annulets either side of crown.

(b) *Obv.* N3 (Br. Va). *Rev.* N5 (Br. Vj-m), N6 (Vp-r).

(c) *Obv.* N5 (Br. Vj-1), N6 (Br. Vp, q, r, s). *Rev.* N6 (Br. Vp-r), N7 (Br. VI).

VII. *Ordinary Bust*, annulet to left, broken annulet to right of crown, sometimes reversed.

Obv. N7 (Br. VI). *Rev.* N7 (Br. VI).

VIII. *As VII*, but annulet to left and trefoil to right of crown, sometimes reversed.

IX. Known only as mules with Henry VI. Brooke notes an obverse without marks with bust differing from that of Henry VI, having a reverse with annulets in two quarters. Also an ordinary obverse of Henry VI with reverse without annulets and pellets widely spaced.

FARTHING:

Legends are usually: **HENRIC REX ANGLI** and **CIVITAS LONDON**. Brooke illustrates one on pl. vii, h, and another may be found in the Lockett Sale Catalogue, English II, no. 1420.

INITIALS USED IN THE TEXT

- BM = British Museum Collection.
 CEB = C. E. Blunt, Esq.
 DM = D. Mangakis, Esq.
 FAW-I = F. A. Walters' sale catalogue 1913.
 FAW-II = F. A. Walters' sale catalogue 1932.
 HAP = H. A. Parsons' sale catalogue 1954.
 Huth = Huth Collection catalogue 1927.
 LAL = L. A. Lawrence Collection or sale catalogue 1951.
 RCB = R. Carlyon-Britton Collection (at B. A. Seaby, Ltd.).
 RCL = R. C. Lockett sale catalogues.
 Roth I = Bernard Roth sale catalogue 1917.

LIST OF ILLUSTRATIONS

PLATE VIII. *Groats of Henry IV:*

1. Type I, die 1. *Rev.* Transitional die no. 1.
2. Type I, die 1. *Rev.* die II-1.
3. Type I, die 2. *Rev.* Transitional die no. 2.
4. Type I, die 3. *Rev.* Richard II type III.

5. Type II, die 1, 8 arches. *Rev.* die I-1. (CEB)
6. Type II, die 2, 10 arches. *Rev.* die II-2.
7. Type III, die 1, *Rev.* die III-1.
8. Type III, die 1, *Rev.* H.V. die Ie.
9. Type III, die 2, *Rev.* die II-3. (CEB)
10. Type III, die 3. *Rev.* H. V. type III. (DM)
11. Type III, die 4. *Rev.* die III-2.
12. Type III, die 6. *Rev.* H. V. type III.

PLATE IX. *Groats of Henry V:*

1. Type I, die 1. *Rev.* H. IV die III-1. (DM)
2. Type I, die 2. *Rev.* type II. (AHB)
3. Type IIa, die 1. *Rev.* type III. (AHB)
4. Type IIa, die 2. *Rev.* type III. (AHB)
5. Type IIb, die 3. *Rev.* type II.
6. Type III, die 7. *Rev.* type III.
7. Type IVb, die 9. *Rev.* type V. (AHB)
8. Type V, die 10. *Rev.* type V. (AHB)
9. Type VIa. *Rev.* type VIa. (AHB)
10. Type VIIc, ~~HENRC, FRANCE~~. *Rev.* type VIII. (AHB)
11. Type VIII. *Rev.* type VIII.
12. Type IX, no mullet. *Rev.* type VIII.

PLATE X. *Half-Groats and Small Silver of Henry IV and V:*

1. Half-Groat, Henry IV, heavy, no. 2. Dies 1/1.
2. Half-Groat, Henry IV, light, die 1. *Rev.* 2.
3. Half-Groat, Henry IV, light, die 2. *Rev.* 3.
4. Half-Groat, Henry V, type I, die 1. *Rev.* type II.
5. Half-Groat, Henry V, type III, 10 arches. *Rev.* type III.
6. Half-Groat, Henry V, type V, annulet/pellet by crown. *Rev.* type V.
7. Half-Groat, Henry V, type VIc. *Rev.* Richard II type IIa.
8. Half-Groat, Henry V, type VII, broken annulet by crown, mullet on breast.
9. Half-Groat, Henry V, type VIII, annulet/trefoil by crown.
10. Half-Groat, Henry V, type IX, no marks by crown.
11. Penny, Henry IV, heavy. *Rev.* Richard II. (RCB).
12. Penny, Henry IV, light, die 1. *Rev.* CIVITAS.LONDON. (BAS)
13. Penny, Henry IV, light, die 2. *Rev.* CIVITAS.LONDON.
14. Penny, Henry IV, light, die 4. *Rev.* +CIVITAS.LONDON.
15. Penny, Henry IV, die altered, mullet added. *Rev.* type II. (CEB)
16. Penny, Henry V, type I, annulet/pellet by crown. (DM)
17. Penny, Henry IV, type VI, mullet/broken annulet by crown.
18. Penny, Henry V, type VIII, mullet/trefoil by crown.
19. Penny, Henry V, type IX, no marks by crown.
20. Halfpenny, Henry IV, heavy.
21. Halfpenny, Henry IV, light, annulets by neck.
22. Halfpenny, Henry V, broken annulets by head.

N.B. Unless otherwise stated the above coins are in the British Museum.

My thanks are due to Messrs. C. E. Blunt and D. Mangakis for permission to publish and illustrate coins from their collections, and also to Messrs. A. H. Baldwin & Sons, Ltd. (AHB), and B. A. Seaby, Ltd. (BAS) for the loan of coins for illustration.

RICHARD II HALF-GROAT DIE NO. 8

IN my article on the silver coinage of Richard II in last year's *Journal*, writing on the half-groat dies, I had this to say about no. 8, probably the last obverse to be produced, and of which one coin was then known in the B.M. collection:

p. 133: 'There are two points which should be mentioned regarding die 8 (ill. Walters sale 1913, 220), which is probably the later of the two. Firstly, where the breast fleur usually appears there is a large worn mark bearing some resemblance

to a crescent, and this, therefore, must be the coin to which Whitton refers in the supplement to Brooke's *English Coins*, as the half-groat with crescent on the breast. Although the mark looks most unlike a fleur, it will be necessary to wait until a less worn specimen turns up before a definite pronouncement can be made.'

I have just acquired a second coin from this die, and while it has been clipped and is also rather worn, especially in the vital area, there is the clear, spread outline of a crescent on the breast, thus vindicating Whitton's view and showing that the crescent was not an entirely isolated issue confined to a few groats. There is now the possibility that a penny of this type may yet turn up.

It is unfortunate that the coin is clipped but the bases of the letters 'C', 'A', 'R', and 'D' are quite clear and have obviously not been 'altered' as suggested in the Walters' catalogue. The reverse of the new coin is similar to that of the B.M. specimen, being of type IIIB, but from still another die hitherto not noted.

CHARLES I TRURO/EXETER HALF-CROWNS

By D. G. LIDDELL and P. A. RAYNER

THE title of this paper is perhaps a little misleading since it is really concerned with the half-crowns of the Truro mint dated 1642. The same obverse die, however, was used on some half-crowns at Exeter in 1644 and again in 1645, so that, inevitably, the coins must be considered to some extent in relation to the other Truro and Exeter pieces.¹

The type of the 1642 half-crowns portrays the king riding to the left on a galloping horse and holding in his left hand a baton. The reverse is an oval garnished shield (Pl. XI, 1). The design is considered to have been taken from the Scottish Rebellion medal by Simon of 1639 (Pl. XI, 2).

There are two reverse dies, which differ only in the placing of a pellet on either side of the mint-mark. There is only one obverse die (Pl. XI, 3 for reverse without pellet).

The authenticity of these half-crowns has been questioned by some numismatists in recent years, due mainly to the unusual appearance of some of the coins. Without actually examining specimens it is difficult to describe their exact appearance, and, unfortunately, the differences would not be apparent on a plate. Some of the known specimens have the appearance of being contemporary pieces, but the majority of them have a somewhat waxy surface, are very perfectly struck, slightly concave and very circular. This has led to the view amongst some numismatists that they are, perhaps, later copies. Moreover, the majority of these coins give the impression of being machine-made and this has hitherto underlined the doubt as to their authenticity.

In this paper, however, we intend to try and show that the coins are, in fact, all contemporary and that they were indeed machine-made, and not struck by hand. No one has, as yet, put forward any definite theories as to how or when these coins were produced, and there seem to be a number of possibilities:

- (a) The coins are all contemporary and struck by the hammer.
- (b) The coins are all contemporary, some being struck by hammer and others by machinery.
- (c) Some of the coins are contemporary pieces and those of what might be termed 'modern' appearance are later copies produced, perhaps, in the late seventeenth or eighteenth century, presumably by a mill and screw press.
- (d) The coins are all contemporary and all machine-made.

We propose to discuss the coins in connexion with these possibilities and, as we have suggested, we hope to bring forward evidence to show that

¹ The type references are to 'Notes on the Mints of Truro and Exeter under Charles I' by R. C. Lockett, F.S.A., published in the *British Numismatic Journal*, vol. xxii, 1936-7.

possibility (*d*) is the most likely. Our researches have been made along four main lines of thought:

1. Consideration of the available historical evidence concerning the Truro mint.
2. Examination of the weights of the coins and their relation to other half-crowns of Truro and Exeter.
3. Microscopic and spectrographic examination of four 1642 half-crowns, and also three other coins for purposes of comparison.
4. Examination of the coins themselves and their relation to the other coins of the Truro and Exeter mints.

1. HISTORICAL EVIDENCE

In considering the historical evidence, we are indebted very much to Miss Mary Coate, who published a paper in the *Numismatic Chronicle* in 1928 entitled 'The Royalist Mints of Truro and Exeter'. Miss Coate obtained most of her material from contemporary records then held at the private home of the Vyvyan family at Trelowarren. These papers are now lodged at the Truro Museum.

Sir Richard Vyvyan was commissioned on 14 November 1642 to coin money, and a mint was established at Truro. There was no mention in the commission that any specific engraver was to be employed, but Sir Richard Vyvyan was asked to send three messengers to procure 'Pyoners and Toolles up to seven or eight dozen'. 'Pyoner' was the local word for a working miner, and there is no evidence of any skilled engraver having been employed. There is, moreover, no evidence of machinery at the mint, and the list of tools at the mint, seized from Sir Richard Vyvyan's house by the local Parliamentary Committee in 1646, does not include any mention of it. This, however, was some four years after the mint commenced work, and since only a relatively small number of the Truro/Exeter coins can have been struck by machine, it is quite probable that, by then, the machine had either been destroyed or was no longer in operation. The absence of evidence of the existence of machinery therefore does not, we think, preclude the possibility of its use, and the type of machine we have in mind, which will be referred to later, could easily have been made by local Cornish miners. A parallel case would be the Irish Ormonde money coins, which are definitely considered to have been struck by machinery, although no evidence of it exists.

Miss Coate's paper makes it clear that the mint tools were provided locally and not by Bristol or Oxford, and the general evidence is that the bullion was also supplied from local plate and not from elsewhere.

The designer of the 1642 half-crowns must obviously have been a skilled workman, and it is possible that Sir Richard Vyvyan obtained a goldsmith from Exeter, which was noted as a goldsmiths' town, rather than Truro. It may well be that this engraver did not accompany the mint when it moved to Exeter, and the general standard of workmanship of the Exeter half-crowns falls considerably below that of the 1642 pieces. Although the 1642 obverse die was used at Exeter in both 1644 and 1645 (Pl. XI, 4 for reverse of 1644 half-crown) its use there may have only been accidental, since both

these coins are extremely rare, and the 1645 piece, of which there is a specimen in the collection of the Earl of Ellesmere, may be unique.

2. WEIGHTS

As will be seen from the table showing the weights, we have weighed a number of specimens ranging from the 1642 half-crowns to the last issues of Exeter in 1645. In the case of the 1642 half-crowns, the specimen in the Ashmolean Museum is of low weight (206 grains) which is substantially less than the next lowest coin, which weighs 213 grains. Despite the inclusion of this lightweight piece, the eleven 1642 half-crowns weighed gave an average weight of 220 grains, which is completely consistent with the average weights of the other types, as the table shows.

Incidentally, the coin in the Ashmolean Museum was presented to that museum in 1745, so that this piece cannot be one of the fairly extensive group of forgeries produced towards the end of the eighteenth century. Snelling and Folkes (*c.* 1750) also illustrate the type.

The main conclusion to be drawn from examination of the weights of the series is that the average weight of the 1642 half-crowns is quite compatible with that of other coins of the period and, therefore, we can safely say that their authenticity cannot be doubted from the point of view of their weight.

3. MICROSCOPIC AND SPECTROGRAPHIC EXAMINATION

Two specimens of the 1642 half-crowns were submitted to the Royal Mint for microscopic examination. These two coins were very kindly lent by Dr. Burstal from his collection. One of these pieces is an example of what we have called a 'modern looking' specimen, and the other is of a much more authentic appearance but is considerably worn.

A specific gravity test was carried out and showed that the coins were struck from silver of even higher standard than the normal alloy and approaching that of pure silver. The microstructure revealed that both coins were struck and not cast.

The two important points revealed by the Royal Mint analysis are, firstly, that these two coins were made from extremely good quality silver and, secondly, that they are struck pieces and not cast.

Spectrographic Analysis

Professor Thompson, of the Department of Metallurgy at the University of Manchester, very kindly carried out some spectrographic tests on seven coins, the results of which are set out below. The coins submitted were four 1642 half-crowns, a half-crown of Truro of the later type with oblong shield on the reverse, an uncertain half-crown, and a Tower Mint shilling Type 4. The last two coins were included merely for purposes of comparison.

It will be seen immediately from this table that the analysis of the four 1642 half-crowns is extremely similar, and particular mention should be made of the high gold content, namely 3 per cent. in each case. This suggests that the coins were struck from gilt plate.

Further evidence to support the view that the coins were made from melted plate is the notable presence of tin and lead in all the coins except the Tower

shilling, where these metals are scarcely apparent. The high percentage of lead and tin indicates a most unusual alloy, but would be quite consistent with the remelting of plate where these metals would have come from the solder used for the attachment of handles, spouts, &c. The analysis, therefore, is quite consistent with what one would expect to find with the use of plate as bullion, and the presence of gold, tin, and lead is notably absent from the Tower Mint shilling, which is again consistent with its origin. We are, of course, assuming here that the uncertain half-crown, if it is a contemporary coin at all, was struck at some provincial mint. This is apparent from its design.

It should further be noted that the two half-crowns from Dr. Burstal's collection reveal identical quantitative figures, which strongly suggests that they were, in fact, produced from the same melt of metal.

It seems unlikely that a forger operating at a later date would obtain metal of high gold, lead, and tin content.

Professor Thompson puts forward the opinion that all four Truro half-crowns were struck in some sort of press. His reason for coming to this conclusion is that the uniformity of the impression on the coins could only have been produced by machinery.

We do not ourselves agree with this contention, since there are examples of earlier coins, particularly those of James I, which were undoubtedly struck by hammered means, but which have an almost perfect evenness of impression. However, as we have already hinted in this paper, we do consider that the coins were machine-made, but not on account of this evidence.

4. EXAMINATION

Examination of the 1642 half-crowns and also those of 1644 and 1645 with the 1642 obverse, reveals the following points:

- (a) There is a complete regularity of die axis between all nine half-crowns which we have been able to examine, and also between these coins and the two specimens of 1644 with the 1642 obverse. This regularity of die axis could not, in our opinion, have been produced on so many coins if they had been struck by the hammered process and this is, perhaps, the strongest point in favour of the coins having been struck by machinery.
- (b) Most of the 1642 half-crowns show slight concavity. This is a feature which is again very unlikely in a hammered coin, but is quite consistent with the coins having been struck in some sort of 'rocker' press.
- (c) The letter punches on the 1642 half-crowns are very similar to those found on the Type 1 crowns and, in some cases, particularly in the case of 'R' and 'S', the similarity is so great that they may, in fact, be identical.

Moreover, the general style of these Type 1 crowns shows very neat workmanship, and it is possible that they were designed by the same engraver as the 1642 half-crowns.

A characteristic of the Type 1 crowns is the presence of diametrically opposed patches of weak striking. This evidence of weak striking in opposite

positions on the coin again points to the fact that they were struck by machine rather than by hand. These patches of weakness would not be apparent from the use of a mill and screw press, but they are certainly consistent with a 'rocker' press method of striking. The patches of weak striking are not apparent on the half-crowns, but this may well be due to the fact that, where

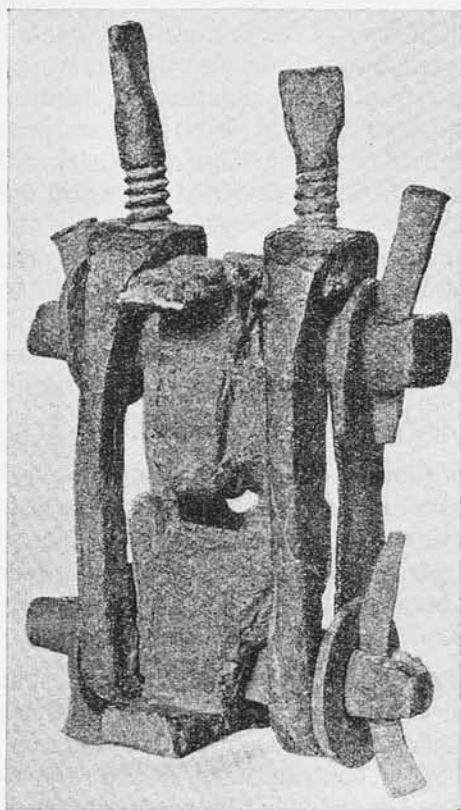


FIG. 1.

the smaller half-crown flan was in use, the rocking movement was sufficient to cover the whole coin, whereas with the crown-sized flan it was not sufficient to do so.

- (d) Some of the Truro crowns of Type 2 show evidence of pinching at the edge, which is characteristic of the use of machinery.
- (e) Most of the 1642 half-crowns have regular flans, but there are specimens, notably the H. P. Hall specimen, which have irregular flans.

Dr. Kent of the British Museum has suggested that this irregularity could well be the result of careless operation of the 'rocker' machine, and the irregular shape does not of itself mean that the coin was not machine-struck.

We have more than once mentioned the possibility of a 'rocker' press. An example of this particular press is now in the British Museum (Fig. 1). It was fully described in an article in the *Numismatic Chronicle* in 1914. It is a seventeenth-century press of a type which was in use in Europe, and in

Germany in particular, and was called in Germany a 'pocket press'. Briefly, a description of the press and method of operation is as follows:

The two cases for holding the dies are of bronze and the rest of the machine is of iron. The dies are sections of cylinders of roughly 2 inches radius. The mechanism was a rocking one. The base was fastened to some kind of block and a lever lashed to the top horizontal bar. By depressing this lever to one side, the whole machine, except the bottom case (containing the lower die) and the base, was rocked, and the two die cylinders were opened out so as to make space for the insertion of the blank between the dies. The lever was then pulled over in the opposite direction, exerting great pressure as the central parts of the die cylinders came together, thus striking the coin. When the movement was continued, the dies opened out again and the finished coin could be extracted.

The press itself is very crude and a similar type of press could easily have been made by local workmen at Truro. It is not at all large and, in view of its rough construction, it would not be at all surprising if its life was short.

We should now like to summarize the evidence we have discussed.

1. It is apparent that the coins were struck and not cast, and all are of exceptionally good quality silver. They are also of good average weight.
2. The existence of four reverse dies including those of 1644 and 1645 and the use of the same 1642 obverse die with these last two coins makes it reasonably certain that at least some of the 1642 coins are contemporary pieces. This view is further supported by the close similarity of style and letter punches between the 1642 half-crowns and the two succeeding types of half-crown as well as the Type 1 crowns.
3. The complete similarity of die axis makes it almost certain that the coins were machine-struck and, since we have shown that at least some of the coins were contemporary, this similarity of die axis makes it extremely likely that they are all contemporary, since a forger, operating at a later date, would be mostly unlikely to reproduce coins having the same die axis as the originals.
4. The spectrographic analysis shows the coins examined to be so similar in metal content that they must all be of one period, and again, since some of the coins must be contemporary, this evidence further supports the view that they are all contemporary pieces.
5. The pinching at the edges on the second type of Truro crown has led Dr. Kent to come to the conclusion that these pieces were definitely struck by machinery, which means, of course, that there was machinery at Truro at the time. Despite the lack of historical evidence of its existence, therefore, we can see no reason why a small 'rocker' press could not have been made and used at Truro.
6. The patches of weak striking, apparent on the Type 1 crowns in opposite positions, is characteristic of coins struck by a 'rocker' press, and the concavity of some of the 1642 half-crowns is again consistent with its use.
7. We are left with the question of the appearance of the coins, which was

stressed at the beginning of this paper and which has been the principal cause of the doubts raised as to their authenticity.

Since the coins were the first of the series and assuming the existence of a 'rocker' press, special care would have been taken in their striking, which would account for the very perfect impressions that most of the coins show. It is more than likely that, with a new machine such as the one we have envisaged, considerable care in the striking of the first coins would have been taken but, in view of the primitive nature of its design, it is equally possible that its efficiency rapidly deteriorated and the less perfect examples of the 1642 half-crowns are those which were produced after the machine had had some use.

In conclusion, whilst we do not pretend to have been able to produce absolutely conclusive evidence, we feel that the suggestion we have made, namely that all these coins are contemporary pieces and that they were struck in some kind of 'rocker' press, is one which is quite consistent with the available evidence and, moreover, the only solution which fits the facts as far as we know them.

We should like to thank particularly Dr. J. P. C. Kent for his considerable assistance in preparing this paper, and especially for the information which he has so kindly given us concerning the operation and use of 'rocker' presses in the seventeenth century.

We should also like to thank Professor F. C. Thompson for his very kind co-operation in carrying out the spectrographic analysis.

We are also deeply indebted to Dr. Burstal, Mr. Ballingal, Messrs. A. H. Baldwin & Sons, Limited, and to the museums and several private collectors who have so kindly lent their coins for examination.

HALF-CROWNS DATED 1642

Gallopig Horse Type

<i>Location</i>	<i>Type</i>	<i>Weight</i>
1. British Museum	1	225 grains
2. British Museum	1a	221 grains
3. H. P. Hall	1	224 grains
4. Spink & Son, Ltd.	1	223 grains
5. Dr. Burstal. Ex Brand	1a	218 grains
6. Dr. Burstal	1a	213 grains
7. A. H. Baldwin & Sons, Ltd. Ex Carter	1	230 grains
8. A. H. Baldwin & Sons, Ltd. Ex Lingford	1	216 grains
9. N. C. Ballingal. Ex Rashleigh	1	221 grains
10. Fitzwilliam Museum. Ex Montagu	1a	228 grains
11. Ashmolean Museum	1	206 grains
12. R. C. Lockett	1	230 grains
13. B. A. Seaby Ltd. Ex Cumberland Clark, Ryan, & Ferguson	1	227 grains

HALF-CROWNS DATED 1644

With 1642 Obverse

13. Miss H. Farquhar	219 grains
14. British Museum	223 grains

HALF-CROWN DATED 1645

With 1642 Obverse

<i>Location</i>	<i>Weight</i>
15. The Earl of Ellesmere	Not known

TABLE OF HALF-CROWN WEIGHTS

<i>Type</i>	<i>No. of speci- mens weighed</i>	<i>Range of weights</i>	<i>Average weights</i>
TRURO 1642	13	206-30 grs.	221 grains
TRURO undated, oblong shield type	7	219-29 grs.	223 grains
TRURO undated, oval garnished shield	22	214-29 grs.	221 grains
EXETER 1644	20	*197-228 grs.	218 grains
EXETER 1645	12	219-28 grs.	222 grains

* This coin may be false. The next lightest in this group weighs 214 grains.

SPECTROGRAPHIC ANALYSIS

PERCENTAGE

<i>Element</i>	<i>1642 half-crown</i>	<i>Another</i>	<i>Another</i>	<i>Another</i>	<i>Half-crown oblong shield type</i>	<i>Uncertain half-crown</i>	<i>Tower Mint shilling</i>
Gold	3	3	3	3	0.6	0.6	B/V
Copper	7.5	5	5	5	7	7	7
Lead	1	0.6	0.5	0.5	0.7	0.7	0.6
Tin	1	1	Trace	Trace	1	1	Trace
Bismuth	Trace	B/V	N.D.	N.D.	Trace	Trace	Trace
Iron	Trace	B/V	Trace	Trace	B/V	B/V	B/V
Zinc	Slight trace	N.D.	N.D.	N.D.	B/V	B/V	N.D.
Silicon	N.D.	N.D.	B/V	B/V	N.D.	N.D.	N.D.
Magnesium	N.D.	N.D.	B/V	B/V	N.D.	N.D.	N.D.

Key: B/V = Barely visible

N.D. = Not detected

SOME FURTHER NOTES ON THOMAS SIMON

By S. A. H. WHETMORE

AN addition to the volume of printed material already published on Thomas Simon, his family, and his work, can only be written with hesitation but, some information not hitherto included in numismatic literature having come to my notice, I venture to add it to the record.

In the first place it may be useful to recall that the chief sources then available were given by Miss Helen Farquhar in her paper of 1932.¹ To her list must be added her own paper of 1936,² one by Mr. H. W. Henfrey³ and two by Mr. D. F. Allen.⁴

Thomas Simon was a son of Peter Simon, born in Blackfriars, himself the son of a Peter Simon born within the jurisdiction of the French king. When Sir George Bolles, Lord Mayor of London, compiled in 1618 by order of the Privy Council a list of strangers residing in the City, the father of Thomas was recorded as living in Walbrook Ward and trading beyond the seas.⁵ The following entry in the marriage registers of St. Stephen's Walbrook indicates that a home had been established in Walbrook by 1611.

25 Jan. 1611-12 John Johnson of Kingston in Surrey and Mary Bennett servant wth Mr. Peter Symond, frenchman.⁶

Peter Simon married Anne, daughter of Gille Germain of Guernsey on 12 September 1611, in the French church then existing in Threadneedle Street. An extensive table of the Simon family and their relations, compiled by the late Mr. Charles Anthony, F.R.S.E., was attached to Miss Farquhar's paper of 1936 and it shows that seven sons and one daughter were born of the marriage. To this table may now be added the record of the baptism of the eldest son Peter.

Simons, Pierre, fils et petit fils de 2 Pierres S et d'Anne Germin, sa femme Tém Pierre de Beauvoir, Pierre Simon pere = grand, Anne Heury, femme de Pierre Chamberlan. Juil 12 1612.⁷

Nothing more is known of him except that he was alive when Thomas made his will.

There can also be added an eighth son named John who is mentioned in the records of the Worshipful Company of Goldsmiths.

December the 15th 1637.

Memorandum that I John Symon the sonne of Peeter Symon of the parishe of St. Stevens in Walbrocke Marchaunte, do put my selfe apprentize unto George

¹ 'Thomas Simon. One of our Chief Engravers', *Num. Chron.* 1932.

² 'New Light on Thomas Simon', *Num. Chron.* 1936.

³ 'On Thomas Simon's Connection with Guernsey', *Num. Chron.* 1874.

⁴ 'Warrants and Sketches of Thomas Simon', *B.N.J.* 1938-40; 'The Coinage of Cromwell and its Imitations', *B.N.J.* 1943-4.

⁵ 'List of Foreigners resident in England 1618-1688', *Camden Society*, vol. lxxxii, Appendix.

⁶ Registers of St. Stephen's Walbrook—*Harleian Society Registers*, vol. xlix.

⁷ *Publications of the Huguenot Society of London*, vol. ix.

Crompton Cittizen and Goldsmith of London for the tearme of eight yeares to begin at the ffeast of St. Thomas next coming (December 21st).¹

(Signed) John Simon.

The baptism of Thomas in the French church on 26 April 1618 has been noted before but it can be added that his parents took the unusual course of registering the baptism also in the records of St. Stephen's Walbrook.

'3 May 1618 Thomas son of Peter Symons and Anne his wife Christened at the French Church.' The entry was signed in the margin 'Thomas Dickenson Churchwarden'.

Vertue recorded that Abraham, an elder brother of Thomas, was 'trained to Scholarship with intention to recommend himself to ecclesiastical preferment' and, presumably, higher education was available to Thomas had he shown a desire for learning. His name is not to be found in the records of the City schools which have survived to our time and he entered his first apprenticeship at the age of fifteen. The Goldsmiths' Company records have, under 30 August 1633,

Memorandum that I Thomas Symonds the sonne of Peeter Symonds of the parish of St. Stevens in Walbroke, Marchant, do put my selfe apprentice unto George Crompton of London, Goldsmith, for the terme of eyght years to begin at Michaelmas next coming.

(Signed) Thomas Symons.

A second apprenticeship, already noted by Miss Farquhar,² was made on 25 September 1635.

Memorandum that I Thomas Symons the sonne of Peeter Simons of Walbroke London, Marchante, do put myselfe apprentice unto Edward Greene cittizen and Goldsmith of London for the tearme of seaven yeares to begin at Michaelmas next coming.

(Signed) Thomas Simons.

There is a note in the margin 'Upon sealinge of these indentures those indentures betweene Simons and Crompton are to be cancelled'.

This was not a 'turning over' as when a master died and an unexpired apprentice went to a new master for the balance of his term. George Crompton was still alive in 1637 to take John Simon into his care. It was a new binding to an apprenticeship to end on 28 September 1642.

George Crompton does not seem to have made a reputation as a medallist; he is unrecorded by Mr. Forrer.³ Edward Greene was chief engraver at the Mint from 1630 to nearly the end of 1644.⁴ Vertue, in his notebook, stated 'Thomas Simonds, Engraver to the Mint, brought into that service by Sr. Robert Harley, who was warden of the Mint in Charles first Time'.⁵ Harley served his first term as master and warden of the Mint from September 1626 to August 1635. It is possible that Crompton, noticing the special ability of his pupil for the development of which his own work offered little opportunity, arranged with Greene, a brother Freeman of

¹ For the extracts from the records of the Worshipful Company of Goldsmiths I am indebted to Miss Susan Hare, Librarian to the Company.

² *Num. Chron.* 1936.

³ *Biographical Dictionary of Medallists*, L. Forrer.

⁴ *Num. Chron.* 1913.

⁵ *Walpole Society*, vol. xviii, p. 124.

the Worshipful Company, for his transfer to the place where the widest experience could be offered, a step which the Warden formally approved.

Simon progressed so much that in 1638, whilst still an apprentice, he made a seal for the Earl of Northumberland for use in his office as Lord High Admiral and in 1643, when just out of his term, he made his first Great Seal of the Realm. He was taken to the House of Commons on 19 July 1643 and the House ordered

that Mr. Simonds be required and enjoined forthwith to make a new Great Seal of England and that he shall have £100 for his pains, £40 in hand and 3 score pounds so soon as he shall have finished the work.¹

On 4 April 1645 Simon was appointed joint chief engraver. The full patent was given by Nightingale in 1842.²

Without the Freedom of the Goldsmiths' Company Simon could make important seals of State and be appointed to a professional office under the Crown, but without that Freedom he could not bind an apprentice at Goldsmiths' Hall. He was slow in proceeding to his Freedom and did not take it until nearly four years after the end of his service. The Minute of the Court held on 12 June 1646 reads:

At this Courte Thomas Symon appr. with Edward Greene. Goldsmith deceased was sworne & made free by service upon a noate produced of Mrs. Greene's assent thereunto.

Simon may have had a special reason for taking this step. It seems clear from his will that he had a particular affection for his younger brother Lawrence who was, apparently, of an unthrifty disposition. Perhaps Simon thought that, if he could get control of him, he might mend his ways. Lawrence became his apprentice on 7 May 1647, the entry in the records of the Company being

Memorandum that I Lawrence Simon the sonne of Peter Symon of London, Marchant, do put my selfe apprentice unto Thomas Symon cittizen and Goldsmith of London for the terme of seaven yeares to begin this presente day.

(Signed) Lawrens Symon.

He stayed the course and, three days after completing his term, he proceeded to his Freedom on 10 May 1654, thereafter being given work by his brother in the Mint. Vertue in his book³ gave a copy of an account, prepared by Simon in 1665, of the money due to him by the Treasury for work done since the Restoration. It includes an item of sixty pounds 'For three assistant workmen besides myself, for making dozens of piles and tressels att the first coynage at 55 per diem, working so many days about them.' There is a marginal note 'My brother Lawrence that deserved least had 30L of me'. Thomas in his will left money towards the payment of the debts of Lawrence and also a life pension. A note attached to Mr. Anthony's table shows that Lawrence was still alive in Guernsey in 1681 and receiving money from London.

The *Journals of the House of Commons* show that on Saturday, 6 January 1648-9, a Committee of the House was ordered to bring into the House on

¹ Wyon, *Great Seals*.

² *Num. Chron.* 1842.

³ *Medals, Coins, Great Seals etc. of Thomas Simon*.

the following Monday a form for a new Great Seal; actually it did not appear until Tuesday. On 26 January Simon was authorized to engrave the Seal and on 7 February it was ordered that it should be brought into the House the following day. Vertue remarked 'The small time our Artist had to design and engrave the first great seal made it appear a surprizing Performance' whilst Wyon stated

The speed with which this Seal had been prepared is very remarkable even supposing that Simon had already commenced the work as soon as the design had been agreed upon (Jan 9th). It was impossible for him in so short a time to have produced one of his more finished works of art. This want of perfect workmanship may have been the cause of the replacement three years later by a Seal of the same general design but of the finer finish which I will now describe.¹

Parliament was, of course, in a hurry but was Simon subject to some private pressure? Had the date of his marriage been fixed and was it imminent?

It was recorded in *Notes and Queries* in 1855 that Simon married a Guernsey woman, the daughter and sole heiress of Cardin Fautrat² and in 1856 it was found that her name was Elizabeth.³ In 1861, in the same journal, a statement by P. S. Carey was published which included the following paragraph:

I believe Thomas Simon was married in or about the year 1650, certainly not later than 1653, and I think it likely that the marriage was solemnised in Maidstone, probably while Wilson was the incumbent.⁴

From the last paragraph of Mr. Henfrey's paper it seems that the writer of the note was Sir P. Stafford Carey, Bailiff of Guernsey, a descendant of Peter Carey, Lieutenant Bailiff in 1656 and a first cousin of Simon. The clue offered by Sir Stafford does not appear to have been followed.

Thomas Wilson was the incumbent of the parish church of All Saints' in Maidstone from 1644 to 1654.

Five days after the delivery of the new Great Seal the registers of the church disclose that the following marriage took place.

13 Feb. 1648-9. Thomas Simmons of Clements London gent and Elizabeth ffautress of this Parish.⁵

'Simmons' presents no difficulty, for the many variations in the spelling of the name will be apparent. Simon became a ratepayer in the parish of St. Clement Danes in London shortly after this marriage and may have been a lodger there whilst still a bachelor. His affection for the church is marked in his will. The description of the social status of Simmons is consistent with that of Simon. The spelling of the name of the bride is puzzling and seems a greater departure from correctness than was usual, but there is other evidence in favour of the marriage.

The registers disclose two baptisms:

19 March 1655-6. Thomas Simmons son of Thomas Simmons and Elizabeth his wife.

29 June 1657 Elizabeth Simmons the daughter of Thomas and Elizabeth his wife.

¹ Wyon, *Great Seals*.

² *Notes and Queries*, 1st ser. xii.

³ *Notes and Queries*, 2nd ser. ii.

⁴ *Notes and Queries*, 2nd ser. xii.

⁵ For the extracts from the registers of All Saints, Maidstone, I am indebted to Mr. W. G. Malyon, Parish Clerk.

Thomas will be examined later; a daughter Elizabeth was a beneficiary under Simon's will.

Thomas Simon was alive on 25 June 1665 when he added a codicil to his will; he was dead by 23 August 1665 when probate of his will was granted. 'Thomas Simmons, Gent' was buried in Maidstone on 26 July 1665. In the grant of probate, to be given later, Thomas Simon was described as 'of the parish of Maidstone', although in the will he describes himself as 'of the parish of St. Clement Danes'. There is good ground for Sir Stafford Carey's belief.

Simon set up a home in the parish of St. Clement Danes and his name first appears in the accounts of the churchwardens and overseers of the parish, for a period ended 17 May 1649, under the heading 'Dutchy Liberty' and sub-heading 'Beyond the Savoy'.¹ He thus lived in the western part of the Liberty of the Duchy of Lancaster which lay to the south of the Strand. From Porter's map of London (c. 1660) it appears that a row of dwellings faced the Strand between which and the river was open land and some larger houses. His name appears in various spellings until 1664 and he had chosen a very select locality, his neighbours including the Lord Chancellor (£3. 15s), Earl of Salisbury (£1), Lord Ashley (£2. 10s.), the French Ambassador (£2. 10s.) and Lady Harbett (£1. 10s.). The figures in brackets are the assessments in 1664. Simon's own assessment was sixteen shillings, the highest for an untitled person except Henry Slingsby who was Master of the Mint (1662-80). The rate for 1665 was paid by 'Widow Symonds' and thereafter the name disappears from 'beyond the Savoy'.

According to his will Simon was survived by a son and two daughters, Samuel, Elizabeth, and Ann, whilst Miss Farquhar stated he was predeceased by two sons. Such was the case. Samuel was born on 1 April 1653 and baptized in St. Clement Danes on 13 April 1653. Ann was baptized in the same church on 15 September 1659 whilst the baptism of Elizabeth in Maidstone on 29 June 1657 has already been mentioned. The baptismal records of the French church in Threadneedle Street give:

Simon, Zacharie, fils de Thomas et Elizabeth sa femme *Tém* Zacharie Bertrand Dec 28 1662.

and the records of St. Clement Danes give:

Zachariah Simon, a youth buried 21 Sept 1664.

The word 'youth' may be difficult but there can be little doubt that the entries refer to one child.

Thomas was born on 29 December 1655, baptized on 6 January 1655-6 in St. Clement Danes, and buried there on 13 February 1656-7. It will be recalled that Thomas Simmons was baptized in Maidstone on 19 March 1655-6 and it must be that this child was baptized twice as was his father. His baptism in London took place eight days after his birth and that of his brother Samuel twelve days after his birth. It may be that the parents wished the son, who bore his father's name, to be baptized in the church in which they had been married but that pressure of work prevented a visit to Maidstone until over two months after the boy's birth, too long to leave him unbaptized.

¹ The records of the parish are in the custody of the Archivist to the City of Westminster.

The information given above of the family fills the gaps in Mr. Anthony's table.

Turning again to Simon's official life he had the pleasing experience of appointment by Parliament as 'sole Chief Engraver to the Mints and Seals' on 25 April 1649.¹

The authorities had been concerned for some time with the quality of the coinage and on 2 February 1649-50 the Council of State ordered the Committee of the Mint to call Peter Blondeau from France for conference. He came to London and quickly found himself in conflict with the vested interests of the Corporation of Moniers in the Mint. The long-drawn-out negotiations, the technical competition between Blondeau and David Ramage, representing the Corporation, and the battle of memoranda are fully described in the third chapter of Mr. Henfrey's book.² Simon was not directly involved in this quarrel but he very probably made the dies for Blondeau's patterns, as the latter was not an engraver. He was instructed by the Committee of the Mint on 8 May 1651 to deliver to Ramage 'two rollers and a drawing mill' and the next day Blondeau was authorized 'to make use of such Engines and Instruments necessary thereunto, as are at present in the custody of Mr. Simons the Graver of the Mint. And shall worke either at the s^d Simons, his house, or any such house or place, as the said Blondeau shall thinke most convenient for his work.' Violet stated that Blondeau made his patterns in a private house in the Strand.³ If this were the domestic home Mrs. Simon must have been a patient lady.

After the battle of Dunbar on 3 September 1650 Simon was ordered by Parliament to make a commemorative medal and he went to Edinburgh to submit designs to Cromwell. In a letter to Parliament Cromwell included a very favourable opinion of Simon's merits and a request that he might be appointed to the post which Nicholas Briot had held before him. The complete letter appears in both Vertue's and Henfrey's books.

In 1651 Simon made a new Great Seal of England, similar in design to that of 1648 but of perfect workmanship, and two years later he made yet another when Cromwell became Lord Protector on 16 December 1653.

A little later Simon became involved in a lawsuit in Guernsey in protection of an interest of his wife. It may be useful briefly to recall the event. The matter was first mentioned by Mr. Edgar MacCulloch of Guernsey in 1855 in *Notes and Queries*⁴ and the story was later developed by Henfrey.⁵ The action, begun in 1655, lay between Thomas Simon, acting for his wife and the other coheirs of the estate of John Fautrat senior, Elizabeth Simon's grandfather, and John Fautrat junior, the subject-matter being the division of the estate amongst the coheirs. Simon was represented in the Guernsey Court by his cousin, Peter Carey, whilst Peter de Beauvoir, another cousin, was active in his interest; so much so that a complaint was made

And the said Peter de Beauvoir makes use of Mr. Thomas Symons, a graver living in the Strand, which Symons having skill in graving and making medalls, hath accesse unto His Highness and many members of the Council, speakes rashly

¹ *Num. Chron.* 1842.

² *Answer of the Corporation of Moniers, 1653.*

³ *Notes and Queries*, 1st ser. xii; 2nd ser. ii.

⁴ *Numismata Cromwelliana.*

⁵ *Num. Chron.* 1874.

of the isle and of the inhabitants thereof and mainteynes and recoñmends the said de Beauvoir, who is his cosen german and his helps and council in a suite in law about inheritance in the island of Guernzey, wherein the said de Beauvoir is very officious to oblige to himself the said Symons.

The Guernsey Court found for the plaintiffs and the defendant appealed to the Council of State in London. On 15 February 1655-6 the Council referred the case back to Guernsey for evidence on matters of fact to be taken from witnesses on oath. This was done and after considerable delay the case was heard by the Council on 22 September 1657, the Lord Protector being present. The appeal was dismissed and the case remitted to the Guernsey Court to enforce judgement. What advantage accrued to Mrs. Simon is not known.

Whilst the case was proceeding Simon received a further advance. On 15 February 1654-5 the Lord Protector ordered that he should be the sole chief engraver for the Mint and Seals and on the following day that he should be medal-maker for the State.¹ The appointments were confirmed in a lengthy patent granted by Cromwell on 9 July 1656 which ordered that Simon should receive 'the like fees, rewards, allowances and profits as Thomas Anthony, Charles Anthony, or Dericke Anthony, deceased, John Gilbert, Edward Greene, or any of them or any other engravers or cutters belonging to any King or Queen of England hath had or received'.²

In 1656 the Council finally decided that a coinage should be struck by the mechanical method invented by Blondeau and on 9 December designs prepared by Simon were approved. There were several delays in making a start, the source of the bullion was changed, Blondeau was first allotted the rooms in the Mint formerly used by Briot, then Worcester House was chosen and, finally, part of Drury House where the coins were actually struck. Possibly the vested interests in the Mint, where the 'harp and cross' design coins continued to be made, pursued Blondeau in his retreat, for he complained of interruption of his work by demolition of part of the building. The matter came before the Council on 16 July 1657 and on 17 November they asked the Lord Protector for a grant from the Treasury to provide Blondeau with machinery and tools adequate to strike coins to the value of £10,000 per week and they ordered proper space to be arranged in Drury House, including the evacuation of one of the residents. It would have taken a considerable time before everything was ready and the work could not have been fully developed before the death of Cromwell on 3 September 1658. The dies were made by Simon and the effigy of the Protector is regarded as a significant example of his work.

Richard Cromwell, successor to his father, entered upon a few months of troublesome rule which ended in his resignation in May 1659. In that month a new Great Seal, made by Simon, was presented to the House of Commons. The House ordered that Simon be referred to the Committee of Safety who were to consider what was fit to allow him for his work and to arrange payment and it was further ordered that Simon's claim for payment for the former Great Seals he had made should be referred to the Council of State

¹ Henfrey, p. 35.

² Vertue, pp. 67-72.

when it should be constituted,¹ a matter to be remembered when considering the financial position of Simon at the time of his death.

On 29 May 1660 Charles II was restored to his throne. He found Thomas Rawlins in possession of a patent from his father of April 1645 appointing him chief engraver, and also Thomas Simon with the patents of 1649 and 1656 already mentioned. Rawlins had followed the fortunes of Charles I and after his death had led a distressful life including imprisonment for debt.² Thomas Simon had worked assiduously for the Commonwealth and Protectorate and had lived in comfortable circumstances. He asked the king for pardon and it is worth while to insert his petition, clear in its expression of fault but in the circumstances bold in making demands.

To the Kings most excellent Majestie Charles the second, by the grace of God Kinge of England, Scotland, France and Ireland etc.

The humble Peti^{on} of Thomas Simon Engraver

That whereas your Peti^r hath been for these 35 years past, bred up in that employment, being a servant to one Edward Greene Chiefe Graver to his late Maiesty of blessed Memory, in which service hee did engrave most of the Greate Seales and Originall Stamps for Coynes with the good approbation of his Maiesty And whereas in the unhappy difference betweene the late King & Parliament your Petitioner being noted for his skill in that Art, was by Order of Parliament comãded to make their Greate Seale in the yeare 43 and after the decease of his Master was by them made Cheife Graver of the Minte and Seales.

Your Pet^r therefore humbly implores your Maiestys Gracious pardon for what he soe unhappily acted by their Comãd and to be graciously pleased to admitt him into favor and to confer on him the employment of Cheife Graver to your Maiesty and of your Maiesties Minte and Seales, assuring your Maiestie that hee shall with all faithfulness and loyalty aquit himselfe in the discharge of what ever your Maiesty shall be graciously pleased to entrust him with
And your Pet^r shall pray³

(Signed) Tho: Simon.

Simon made a mistake in his dates, for it was only twenty-five years since his binding to Edward Greene.

In the event the king honoured the patent granted to Rawlins without further ado, beyond a Treasury note that he was to be reinstated.⁴ On the other hand no action was taken against Simon and by August 1660 he was receiving instructions for work in the Mint. Perhaps this favourable treatment was due in part to the recollections which the king certainly had of a convivial Thomas Symonds and his wife Ursula, who had aided him in his difficult journey to the coast after his defeat at Worcester.⁵

The authorities urgently required a new regal coinage to take the place of the Commonwealth issues, which were withdrawn, but the assistance received from Simon was not to their satisfaction. No doubt he felt some revulsion to the new conditions in which he found himself, but it is also very likely that he was called upon to do much more work than he could perform to his own

¹ Vertue, p. 39, quoting *Journals of the House of Commons*.

² *Biographical Dictionary of Medallists*, L. Forrer.

³ P.R.O. *State Papers (Domestic) Charles II*, Vol. 1, Crown Copyright.

⁴ 'English Mint Engravers', H. Symonds, *Num. Chron.* 1913.

⁵ *King Charles II*, Sir Arthur Bryant.

artistic standards. Vertue records some of the warrants which were issued at the time¹ and a climax seems to have been reached at a meeting of the Lords Commissioners of the Treasury, on 18 August 1660, at which the king was present. The record states:

The greate publique inconveniences and damage from the standing still of the Mint being this day represented to his Majesty, and the occasion of it being alleiged to bee, that Mr. Symonde had not yet fitted the Stamps and tools that were of necessary and present use, and that by reason hee pretended hee had other warrants for graving several seales for Scotland and Ireland, his Majesty prepared and required a peremptory and absolute order from this board to be sent to Mr. Simonde: And in conformity at his Majesty's pleasure, the Lords Commissioners doe hereby order, That Mr. Simonde forbear all other services, until he hath perfected all things which belonge to him to doe, for setting the Mint presently to worke: and that he use all speed and dilligence therein, suitable to the absoluteness of this order and hereof he is not to fail.

At a meeting on 24 January 1661, at which the king was present, an order was issued prohibiting the manufacture of punches, matrices, and dies except in the Mint and directing Simon to bring unto the Mint all tools and engines for coining he had in his custody.

A more pleasing event took place on 2 June 1661 when a patent was issued to Simon, as one of the chief engravers, 'to succeed Nicholas Briot defunct' with an allowance of £50 per annum which was greater than the allowance received by Rawlins.²

The opposition of the Corporation of Moniers to Blondeau during his Commonwealth visit and the secrecy of the man himself must have prevented anyone in the Mint from mastering his machinery. Consequently it was decided to bring him to London again and Simon was issued a pass on 8 November 1661 to go to and return from France.

The pressure on the Mint was now so heavy that an increase in the higher engraving staff was necessary. The king had become acquainted during his exile with the Roettier family of engravers and on 19 May 1662 John Roettier was appointed 'one of the chief engravers' with the same salary as Simon and he was ordered to make the punches, &c., for the coins to be produced mechanically.³ His designs were used for the coinage of 1662. There followed what has been described as a trial in art to which Simon submitted his famous Petition Crown, dated 1663. It is necessary to read as it was written Miss Farquhar's assembly of the facts and expression of opinion in her paper of 1932.⁴ Apart from this it is perhaps reasonable to think that the Roettier designs were adequate for a badly needed commercial coinage whilst Simon's wonderful example of his medallic skill might have worn rapidly in circulation.

Simon continued to work in the Mint until a few months before his death in 1665, probably a disappointed man but enjoying the favour of the king who, in a direct Warrant dated 26 September 1664, called him 'our trusty and well-beloved Thomas Simonds, one of our chief engravers'.

Reasons for believing Simon died in Maidstone in July 1665 have already been given. Miss Farquhar concluded he died on 5 August 1665,⁵ a date she

¹ Vertue, pp. 83-85.

² *Num. Chron.* 1842.

³ *Num. Chron.* 1913.

⁴ *Num. Chron.* 1932.

⁵ *Num. Chron.* 1936.

derived from an article in *Apollo*¹ by Mr. E. Alfred Jones who quoted from a work by Sir Walter Prideaux.² Mr. Jones gave a copy of a Minute of the Court of Assistants of the Goldsmiths' Company in the following words:

Symons the graver having died (August 5 1665) it was ascertained that the 'punsons' used in the Company in marking plate were in the possession of his wife or servant and it was ordered that they were to be got into the custody of the Company without delay.

This is not an exact copy from Sir Walter Prideaux who in his turn considerably condensed the original Minute of the Court of Assistants which met on 5 August 1665. The Minute, in the original record, reads:

At this Court as from information by Mr. Warden Mason that Mr. Symons the graver of the punsons was lately dead and that the counter punsons (by which two strokes of the punsons used by this Company in marking of their plate) were in the custody of his wife or servants it is thought fit and the Wardens are by this Court desired to use all possible care and speed they can to get the said counter punsons into their custody and when they have the same they are then to be disposed of as a Court of Assistants shall think fit.

It is clear from the wording of the Minute that Simon died before the date of the meeting of the Court. It is interesting that, in the table attached to Miss Farquhar's paper, Mr. Anthony gave July 1665 as the month of the death but he did not give the day. He also stated that Simon was buried in St. Clement Danes but his name is not to be found in the registers.

Mrs. Simon became a widow with a son aged twelve, two daughters aged five and eight respectively and probably with considerable financial difficulties. She paid the rates for the home in the Savoy for 1665 and then left the district. In 1666 a 'widow Symonds' appears in the records of St. Clement Danes paying a rate of 5s. 6d. for a dwelling in Stanhopp Street, which was reduced to 5s. in 1667. The street was in the Liberty of Westminster to the north of the Strand. There is no direct evidence that the widow was Mrs. Elizabeth Simon but the more cheaply rated dwelling is consistent with a reduction in income. It will be shown later that she had remarried by 1671.

The text of Simon's will was published by C. T. Smythe in 1843 but the subscription thereto, signed by the Registrar, is not the grant of probate.³ The registered copy of the will is in the Archives of the County of Kent with the grant, in contracted Latin, attached. The translation reads:

Probate was granted of the above registered will of Thomas Simon, of the parish of Maidstone in the diocese of Canterbury, deceased, who had considerable goods [i.e. worth over £5] in several dioceses in the province of Canterbury. It was exhibited on 23 August 1665 before Master William Lovelace, clerk and surrogate, and in the presence of me Thomas Simpson, notary public, on the oath of Elizabeth Simons, widow and relict of the deceased, who was named executrix in the will. And it was approved, and the goods committed to the executrix, she being first sworn in due form of law saving the right of all.

And then, viz, on the same day [—?] to the petition of the said executrix, decreed

¹ *Apollo*, vol. xxi, p. 48.

² *Memorials of the Goldsmiths Company*, vol. ii, p. 155.

³ 'The Will of Thomas Simon, the Medal Engraver, with Observations thereon', *Num. Chron.* 1843.

that the said will should be registered, and the transcript thus registered compared with the autograph or original itself, and as much accuracy shown in the copy so registered as in the autograph or original, and the said autograph or original to be handed and delivered to the aforesaid executrix, and thereupon he handed and delivered it.¹

There follows in English 'Received the said originall Will, according to the decree above recorded, 23 August 1665' which receipt was signed 'Elizabeth Simon, Executrix'.

The grant of probate surely determines Maidstone as the place of Simon's death. The possession of property in more than one diocese required that probate should be issued in the Archbishop's Court. If Simon had died in London, application could have been made in Doctors Commons and he would have been buried in St. Clement Danes.

The income enjoyed by Mrs. Simon from her possessions in Guernsey is not known. Briefly her husband's will gave her

- (i) one-third part of the personalty with the remainder of another third part after many legacies had been paid;
- (ii) the income from a farm in Shorn in Kent until her son Samuel reached his majority, that is until 1674.

It also placed upon her the obligation to preserve all the tools of Simon's profession to be given to his nephew William, son of his brother Nathaniel, when he should have served his term and had set himself up as an engraver, failing which they were to be given to Samuel.

It is likely that at the time of Simon's death a considerable part of the personalty consisted of debts due by the Crown from which, on payment, it would be necessary to cover his own debts, which he directed in his will should be paid.

With regard to the pre-Restoration period the remark in the House of Commons in May 1659, indicating the dilatory methods of making payments by the Treasury, has already been noted. Hocking stated that an account dated 1657 covering sixteen foolscap pages was in the Royal Mint.² Henfrey gave a summary of the account with additional information. On 13 July 1658 Simon petitioned the Council for speedy payment in order that he could satisfy his creditors and he remarked that he had received nothing for five years. The accounts may not be complete but it seems that at 5 February 1658-9 of a total debt of £1,861 a sum of £883 was unpaid. This probably became a bad debt.

Payment was just as slow after the Restoration, as Vertue in his book gave at length Simon's account for work done from 12 June 1660 to April 1665, a short time before his death. The account amounted to £3,107 and it is evident from the following document that Simon had been pressing for some payment before his account was completed.

Whereas his Ma^{ty} by his Letters of Privy Seale of the 27th October in the 16th yeare of his Ma^{ty} reigne [i.e. 27th October 1664] has directed the paym^t of the sume of £1,000 unto Thomas Symon (one of his Engrave^{rs}) or his assignes without

¹ I am indebted to the County Archivist for Kent and Miss Dunbar of the Archivist's Department of the City of Westminster for transcriptions and translations.

² *Num. Chron.* 1909.

Accompt. He having made for his Ma^{ty} use and service severall Great Seales for England Scotland and Ireland and other his Forraigne Plantations And also many stamps and Meddalls and other worke and services wherein he disbursed a considerable sume of money and hath not yet rec^d any towards his satisfaccon of the same And his making other things for his Ma^{ty} service, which being not finished his Accompt cannot well be made & presented His Ma^{ty} being well pleased in the meane time to affoord him a sũme of Monye the better to enable him in his said service (the which is to be defalked out of his Accompt when the same shall be presented) These are therefore to pray and require you to draw an order for Paym^t of the same sũme of one thousand pounds unto the said Thomas Symon accordingly And cause Tallyes to be struck for the same upon the Grand Com^s of Excise for the Quarter of the yeare to cr^d at Xmas next And for so doeng, etc.¹

The document was signed by Lord Southampton, the Lord Treasurer, addressed to Sir Robert Long and dated 24 May 1665, just seven months after the king had given his direction. Simon did not know of this when he signed his will on 17 June 1665 but he did know when he added a codicil on 25 June 1665. The money was paid to Mrs. Simon after his death.

At some later date, probably within a year from her husband's death, Mrs. Simon petitioned the king for a settlement of the balance of the account. The petition is not in the Public Record Office but the terms of a further petition, recorded by Nightingale,² show that such an earlier petition was presented.

Some interesting documents are in the Department of Manuscripts, British Museum, obtained at the sale of the library of Mr. Stanesby Alchorne, who helped so much in the preparation of the second edition of Vertue's book. Additional MS. 18762 contains a copy of Simon's account later than that given to Vertue, for the preliminary payment of £1,000 is shown. The examination of the final account took some time. On 8 November 1667 Lord Ashley asked Mr. Slingsby, Master of the Mint, for his opinion on the rates charged by Simon for services amounting to £100 and on 13 December 1667 Mr. Slingsby replied approving the rates on the ground that Simon had waited long for his money and had given so much of his time and that of his workmen for His Majesty that 'he could not gaine leisure to work for private persons whereby to get money to maintain his family'.

There is an undated list of questions put to Mrs. Simon by Lord Ashley and her answers. One relates to the charge for a medal for an Italian musician which is item 28 in the account in Vertue.

To which the said Mrs. Simons humbly answered that the said Medall was made by his Ma^{ties} verbal order and when finished was delivered into his Ma^{ties} owne hande by her said husband in the presence of Mr. Ashburnham as by Memoriall thereof appeared in her said husbände's booke and humbly appealed to his Ma^{ties} memory & shall submit to his Ma^{ties} pleasure therein.

In the final settlement the charge was disallowed.

Lord Ashley also questioned some extraordinary expenses and attendances at Court for directions in connexion with making piles, &c. for the first coin-

¹ P.R.O. *Treasury Early Warrants 1660-1692*, Crown Copyright.

² *Num. Chron.* 1842.

ing at the Mint and Mrs. Simon replied, '... her said husband lost thereby much more w^{ch} he might in that time have earned by graving for Lords and Gent^l'.

The references to private work confirm Miss Farquhar's description of Simon as a 'trading goldsmith'.

Lord Ashley made his final report to the king in a document dated 18 July 1668, in the preface to which is a reference to Mrs. Simon's first petition.

The copy of the account used in Vertue's book is Additional MS. 45190, given to the British Museum by Miss Farquhar in 1938.

The second petition shows that Mrs. Simon was aware that the king had received a report on the first from Lord Ashley, but nothing had been paid because of the death of the Lord Treasurer, Lord Southampton. According to Nightingale the Treasurer was indolent in his discharge of his duties and suffered from a long illness terminating in his death in May 1667. It was not until 1670 that matters were finally settled as the following Royal Warrant shows:

Charles the seconde etc. To the Com^{rs} of our Privy cr. Whereas We did heretofore employ Thomas Symon deceased holder of the Cheife Graveri of our Mint to make severall Great Seales, Stamps meddalls & other works for Our service. And by our L^{res} of Privy Seale bearyng date the seaventeenth day of October in the seventeenth yeare of our Reigne did direct that the s^ume of one thousand pounds should be paid to the said Thomas Symon without acco^t in regard he was then upon sev^{al} other works for Our service by reason whereof his Acco^t could not then bee presented, but the same to be in parte of & to be defalked out of his Acc^t when the same should be brought in Which said s^ume of one thousand pounds was paid to the Relict & Ex^{trix} of the said Thomas Symon as appears by the Certificate of Thomas Street dep^{ty} Accomptant of Our Revenue of the Excise grounded upon the Bookes of disbursement of John Ball Esq^r late Tr^{ear} of our said Revenue And is acknowledged by the said Elizabeth Symon to be received by her And whereas the said Elizabeth Symon hath presented her humble peticon unto Us with an Acc^t of money due to her said husband for the services aforesaid Which Wee did referre to your Examinacon & you did thereupon make Report unto Us that you had caused the same to be examined by Bartholomew Beale Esq one of o^r Auditors of Imports & Richard Sherrwyn Es & by others thereof under their hands it appears that there is claymed in deed over & above the said £1,000 the sum of 2164 whereof the sume of £376 is for service performed for o^r Kingdom of Scotland w^{ch} wee think fit to leave to leye there and for severall Sumes conteyned in the said Acc^t amounting to the sume of £223 10s 00d there are no sufficient Vouchers produced & so the remayning Sume amounts to £1564 10s Our will and pleasure therefore is and Wee doo here bye Authorise & Require you Acc^t out of such o^r treasure as now inhereafter shalbe remayning in the Receyt of o^r Exchq^r you pay or cause to be paid to the said Eliz Symon the said sume of 1564:10:0 due to her said late husband for the service aforesayd the same to be payd to her or her assigns without acc^t etc. And these o^r letters etc. Given etc. Dated the 23 June, 1670.¹

J. Mathews.

Included in the miscellaneous items totally rejected were £65 for the expenses of Simon's journey to France.

The Scottish records show that the claim referred to Scotland was satisfied.

¹ P.R.O. *Treasury (King's Warrants)*, Crown Copyright.

Payed to Mathew Poole of London, clerk, and his spouse, relict and sole executrix of Thomas Simon, late of London, His Majesties Master Graver, the sum of four thousand fyve hundred and twelve pounds scots for seals and signets made and furnished by the said Thomas for His Majestie^s service in Scotland, conform to ane particular accompt, precept of the Lords Commissioners of His Majesties Theasaurarie and discharge accordingly dated 9th March 1671 . . . £4512 scots.¹

At the rate of £12 Scots to one pound sterling this sum was exactly £376.

It is now necessary to recall an extract from Vertue's notebooks already given by Hocking² and Miss Farquhar.³

Of Thomas Simon engraver of Coins & Seals—says Mr. Marlow, Jeweller of Lombard St—that in the year 1676, he then bought of the widow of Simons (who was remarried to Mr. a dissenting Parson) all the tools, stamps, punches, wax impressions, &c, that did belong to Mr. Simons which he left and appointed by Will to be preserved together for the use of his son if he liv'd and should follow the profession of his Father, but as he was of weak understanding when he grew up and not fit for such an employment he was otherwise provided for . . .⁴

In the original manuscript the space following 'Mr.' has been filled by a row of dots for some two and a half centuries; the name Mathew Poole can now be substituted. There is some confusion regarding the terms of Simon's will in Vertue's statement. It has been shown that the tools of Simon's profession were left to his nephew William if he followed the same profession and if he did not—and he did not—they passed to Samuel without obligation. The wax impressions belonged to Samuel in any case, as they and some other objects were left directly to him in his father's will. The possession of them by his mother in 1676 is consistent with some limited intelligence in Samuel, who was then twenty-three years old.

On the other hand Miss Farquhar recorded a statement that Samuel had become a jeweller and had descendants, Mayer and Jean Henri Simon who had attained eminence as gem engravers in Brussels and Paris.⁵ A Samuel Simon married Catherine Ribault in the French church in the Savoy on 8 January 1690–1, by licence from the Dean of Canterbury.⁶ Were he the son of Thomas he would have been thirty-seven years old at that time. In 1850 M. M. Guioth published a paper giving many details of the life of J. H. Simon and descriptions of his work but there is no reference to any such ancestry.⁷ In 1873, however, M. J. F. Leturcq stated 'M. Mayer Simon était d'une famille dont plusieurs membres se distinguèrent dans l'art de la glyptique, un de ces ancêtres, Thomas Simon, vécut à Londres . . .' but the source of the information is not given.⁸ In 1894 M. Ernest Babelon, in an account of Mayer Simon, describes him as 'arrière-petit-fils de Thomas Simon'.⁹ The final paper is 'Note sur Jean Henri Simon Graveur en Pierres Fines et Médailleur Bruxellois' published by M. Alphonse de Witte in 1912.¹⁰

¹ *Treasurer's Accounts 1667–1682*, p. 145, kindly given by the Curator of Historical Records, Edinburgh.

² *Num. Chron.* 1909.

³ *Num. Chron.* 1932.

⁴ *Walpole Society*, vol. xx.

⁵ *Num. Chron.* 1936.

⁶ *Publications of the Huguenot Society of London*, vol. xxvi.

⁷ *Revue de la Numismatique Belge*, vol. vi.

⁸ *Notice sur Jacques Guay*, Paris, 1873.

⁹ *La Gravure en Pierres Fines*, Paris, 1894.

¹⁰ *La Gazette Numismatique*, vol. xvi.

He was critical of M. Guioth's paper and seems doubtful of M. Babelon's reference to Thomas Simon.

S'il faut en croire M. Babelon J. H. Simon serait l'arrière-petit-fils du fameux graveur de pierres fines en médailles et en sceaux Thomas Simon de Londres (1625-1665) dont le frère aîné Abraham Simon (1622-1692) fut lui aussi un médailleur et un graveur de mérite. D'un fils de Thomas Simon, qu'il ne nomme pas, serait né Jacob Simon, époux d'Elizabeth Sara, qui vint habiter Bruxelles ou naquit Jean Henri.

Mayer was born in 1746 and Jean Henri in 1752 and, if their father Jacob were the son of the Samuel mentioned above, there is ample time after his marriage into which Jacob can be fitted. On the present evidence the story seems speculative and it is worthy of note that a statement is made by Guioth that the oration at the funeral of Jean Henri was delivered by the Chief Rabbi.

Some of Simon's tools made a later appearance in 1700. Hocking recorded that one of the minutes of a meeting of the Board of the Royal Mint held on 9 November 1700 recorded that 'The Master [Isaac Newton] reported that he had bought, according to the direction of the Board, 10 puncheons and 9 dies graven by Mr. Symonds famous graver in the time of Ol. Cromwell for 14 guineas'.

Mr. Croker, Ingraver of the Mint, chose out of them to pair 2 puncheons, one a head and the other an armes for crown pieces, two puncheons being a head and armes for sixpences, and two dies being a head and armes for 2^{li} pieces of gold, giving his receipt, and the rest were locked up in the Treasury.¹

The Board Minutes of the Royal Mint appear to be complete from 23 March 1699 to 26 February 1701 but they contain no record of any direction to the Master in this matter nor any other reference. The manuscript records kept by Newton whilst he was Master of the Mint were acquired by the late Lord Wakefield in 1936 and presented by him to the Mint. They contain statements of Warden's and Master's accounts, including an item dated 25 December 1700.

To Eliz Winter for old Puncheons and Dyes of Symonds Work for our Gravers to copy after £15. 1. 6.²

Hocking's paper includes an analysis of the purchase which shows that it contained eleven tools made by Simon and seven of doubtful origin but all related to the Lord Protector's coinage.

Who was Elizabeth Winter has still to be discovered.

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¹ *Num. Chron.* 1909.

² Information kindly furnished by Mr. H. L. Neate.

MINOR PRODUCTS OF BRITISH NINETEENTH-CENTURY DIESINKING

By R. N. P. HAWKINS

THIS article offers a general survey and classification of British nineteenth-century discs existing outside the principal recognized fields of collecting (coins, currency tokens, commemorative medals) together with a progress report on the writer's recently published and continuing studies of specific series and their inter-relationships and general background.

The first series for mention is imitation spade guineas; their chronological place in this survey would have been towards the end, but in order to trace their origins it is necessary to turn back to the latter part of the eighteenth century. Gambling at cards, &c., was then very prevalent; the staple currency was guineas and their halves in the form of coin, not paper. Gaming tokens to represent these coins were therefore necessary, to save wearing them down at play to below their minimum weight for legal tender; when they would fail to find takers owing to the ubiquitous carrying of pocket scales to test for this, and would be disposable only below par, as bullion. The need was met by imitations of guineas in brass-coated dark copper or bronze, later in brass, perhaps starting with those (possibly called 'garden guineas') that crudely copied George III's first issue of guineas. These imitations were dated 1761, 1764, 1781, 1784, &c.; they copied the official legends—sometimes with slight errors in termination which may have been issuers' signatures; and some, which showed a caricatured tall, slim, youthful portrait of the king, were signed (?) with a six-petalled rosette between curlicues or with a lily (?). Their appearance suggests contemporary eighteenth-century manufacture, but whether German or British is open to conjecture; certainly Birmingham button-makers were beginning to supplant Nuremberg in the provision of counters for this country. On the other hand, as will shortly be shown, British manufacture can be postulated in respect of imitations of the spade type of guineas.

Genuine 'spade' guineas were minted with dates ranging from 1787 to 1799, although P. J. Seaby conjectures¹ that the guineas of the last two dates were not released to circulation until 1816 and then only restrictedly for a special purpose.

The legends were:

Obv. GEORGIUS III DEI GRATIA.

Rev. .M.B.F.ET.H.REX.F.D.B.ET.L.D.S.R.I.A.T.ET.E. and date.

EARLIEST IMITATIONS OF SPADE GUINEAS

These and their halves, considered jointly in the following notes, bore dates ranging from 1788 to 1798 and reproduced the official legends. Some were undersized, scalloped-edged, and showed a poor portrait of the king; some of these, moreover, were dark-coloured; each of these features was

¹ In a paper first read on 9 Nov. 1960 to the London Numismatic Club. *L.N.C. News Letter*, iii, 155.

clearly a deliberate avoidance of counterfeiting. Others were fair copies in likeness and size with no attempt at darkening. But in addition, most or all were signed with the name or initials of the issuer, and this surely served as the chief protection against prosecution. Of some dozen signing issuers, four used variously surnames and initials, the rest only initials. Juxtaposition of lists of the total known products of five of this round dozen of issuers, and for good measure two other medallistists, provides fair evidence for the proposition that the imitations in this group were contemporary with the genuine guineas and a plausible deduction that the dates appearing on the imitations were their actual issue-dates. This evidence, together with identification particulars of the firms in the sample, is summarized in Appendix I.

SUBSEQUENT IMITATIONS OF SPADE GUINEAS

These are all, in the case of the whole guinea, of full- or over-size and made of brass. They bear arbitrary eighteenth-century dates which have no significance. Those which on both sides reproduce the official types and legends are unsigned and virtually undateable except as being before about 1880, when Batty listed them; one, of superior workmanship, in the British Museum is ticketed as acquired in 1870 and made in 1867 by H(enry) Smith of Birmingham, a manufacturer of numerous metallic checks and tickets, active *c.* 1854–92. The rest lie in a long period starting probably no earlier than 1860 and running well into the twentieth century; they form several groups according to the manner of divergence from the official prototype. Most obverses retain a bust, usually purporting to represent George III; most reverses retain the crowned spade-shaped shield, sometimes considerably shrunk or a mere outline. One group shows the normal form of obverse, and crowned shield reverses with legends about the Good Old Days (or Times) and date 1768 or 1788; there are numerous dies; manufacture may not yet have ceased and usage has been largely for theatrical purposes. The most interesting group, often dated '1790' or '1791', differs from standard in having reverse legends composed of a string of letters separated by stops; starting with a firm's initials, using ET for '&', continuing with initials of its business and sometimes a contraction of its street address (REX F.D. from the official legend may be interposed), and sometimes ending with B.I.R.M. for its town address, Birmingham. The originators of this style were possibly the partners Thomas Brookes and Thomas Adams who, after serving their apprenticeships¹ under the medalist partners John Allen & Joseph Moore, set up their own business in Birmingham in 1853 and in 1865 moved to Barr Street, Hockley, whence they issued their spade guinea imitations—recorded in Batty's instalment published in 1878—reading:

T.B.ET T.A.REX.F.D.B.AR.S.T.DS.T.M.S.ET.C. and date 1790.

The letters after the Barr Street indication stand for 'Diesinkers, Tool Makers, Stampers, etc.'. This is a typical example of pieces of period *c.* 1865–95 struck for self-advertisement by the brass stampers and piercers (usually indicated by the letters s.p.) and these firms are comparatively easy to trace in directories;

¹ A photograph of Thos. Brookes's indenture was published in the centenary brochure (1953) of Brookes & Adams, Ltd., Birmingham.

but the group also includes pieces where the trade particulars are shown as DG.I. or DG.L.T., and these indicators and the initials of the firms associated with them (thought to be only issuers, not the actual makers of the discs) have so far defied solution even where the town clue B.I.R.M. is present.

Another group, which started about the same time but flourished chiefly from about 1890 to 1910, shows the issuers' names (they are usually not the makers) *in extenso*, and likewise their trades and sometimes addresses; using for this purpose as much as they need of the obverse and reverse faces (e.g.: the circular legend on one or other face; or the whole of one face plus the circular legend on the other face so that nothing of the guinea type survives except the bust or crowned shield). This group, although prosaic in its individual pieces—except for the one¹ issued by William Boland, a Birmingham watch-chain maker, with the legends translated into French ('Guillaume Bolander', &c.)—includes at least two interesting numismatic aspects. The first, affecting a portion of this group, is a small web of dielinkings embracing advertisement guineas of several tradesmen—and a Sunday school—joined with one piece from the preceding group bearing the particulars of a brass-stamping firm, as below, possibly indicative of its having manufactured all these linked pieces:

G.Y.I.ET.F.G.REX.S.UF.ST.DS.T.M.S.ET .1701.

standing for: 'George Yorke Iliffe and Frederick Gardner, Suffolk Street (Birmingham), diesinkers, tool makers, stampers, et(c.)' Iliffe set up in business in 1874/6, in Suffolk St.; Gardner worked with him for a short while within the period 1877–83; Iliffe moved to another street between 1885 and 1888 and continued in business for many years. The group's second interesting feature selected for mention is the linking of two distinct series of discs by the instance of one tradesman's having advertised in both. He was William Brignell Reeves, a Birmingham hatter, who from directory evidence started business in 1866, 1867, or 1868, and continued it until about 1886. His spade guinea disc shows a standard obverse and centre reverse; the legends are in bold sanserif type, that on the reverse reading: W.B. REEVES HATTER BIRMINGHAM. His other advertising disc is mentioned later under its own series (see p. 181).

Reverting to the early part of the nineteenth century:

Wellington's victories in the Iberian Peninsula were commemorated by, *inter alia*, a set of 25 miniature medalets ($\frac{5}{8}$ -inch diam.) in Æ gilt; the obverses showing a winged Victory flying to left, bearing a laurel wreath and a flaming sword; the reverses each show the name and date of one battle.

The annual striking of medal-like pocket calendars (Æ $1\frac{1}{2}$ inch diam.), each lasting one year, was performed by firms working in succession. The last issue by James Davies of Birmingham was in 1798 and probably marked the end of his business. The Kempson family of Birmingham buttonmakers, under their successive business styles (e.g. in 1802–9 'Kempson & Kindon', i.e. Peter Kempson in partnership with the metal merchant James Kindon),

¹ Particulars kindly supplied by Hurmuz Kaus, Esq., Hyderabad, from his specimens.

struck the next run of issues 1797–1825. T. W. Ingram followed with calendars for 1827 and 1828 and an unidentified artist signing as 'R.C.' struck one in 1831 commemorating the Reform Bill. This or the Ingram issues marked the end of the era of Birmingham annual strikings. A London clothier, E. Moses & Son, had a fresh issue struck in lead in 1846 to advertise starting up in business (the concern flourished for many years with a number of branches in London and Yorkshire) and advertised on further issues in 1850 and 1853. A few other advertising, &c. calendars appeared in the 1820's, 1876, and, including one struck in Edinburgh, in the 1890's. There were also sporadic issues of similar discs on other subjects—multiplication tables, the kings and queens of England and their accession dates (by Thos. Halliday, 1822), and 'The English Numismatic Medal' which was a table showing the denominations of English coins struck by each king and queen, issued by the London coin dealer William Webster, possibly struck by W. J. Taylor.

The nineteenth century marked the maximum intensity in production of medals: of current historical topics including as usual coronations and other royal occasions, of societies and clubs, schools, railways, exhibitions, &c. The principal diesinking centre was Birmingham and the only other one of consequence in the U.K. was London. Dublin played a large part, assisted by Birmingham and perhaps other centres, in the striking of Irish tradesmen's tokens; which, unlike the halt of the English ones in 1797 and resumption in 1811 for very few years, continued without break over the turn of the century and onwards, right into the 1850's in the farthing denomination. Scotland had some $\frac{1}{4}d.$ tokens in the 1820's and 1830's. English tradesmen's tokens bearing a value marking virtually terminated before the Act of 27 July 1817 forbidding them; English production of tokens for Canada proceeded apace until the 1850's, and was then switched to the Australian and New Zealand needs—these exports gradually giving way to production over there, by branches of U.K. diesinkers and by indigenous makers, where it ended about 1880. Export orders obtained for coinages and coin blanks by the major private diesinking concerns (Thomason, Heaton) and for tokens by concerns of the same and lesser calibre (Heaton, Halliday, Thomason, Moore, Taylor, Pope, &c.) did not by any means fully occupy the productive resources existing when the wide-scale issue of English currency tokens finally ended. The spare capacity was turned largely to medals but partly to fairly banal kinds of discs.

In the 1820's these consisted mainly of an increased range of cheap medalets relating to the royal family; and included the well-known advertisement tickets of Sparrow, the Bishopsgate ironmonger, on which he boasted of his ascent in a balloon at Oxford in 1823. In 1830 there appeared a small satirical disc marking the downfall of the Duke of Wellington's government and his replacement as Premier by Lord Grey with the assistance of William IV; the reverse type with its inscription 'By trampling on Liberty I lost the Reins' was reused on an obituary disc of William IV, 1837. In 1830 also, or slightly earlier, began the issuing of the series of counters known as 'whist markers', normally characterized by showing on one side a man or woman seated at a table engaged in card-playing; they were struck intermittently over about thirty years by various successive issuers including T. W. Ingram, S. Hiron,

J. Hinks, Allen & Moore, T. Pope & Co., usually farthing-sized but from some workshops half-penny-sized. A favourite inscription was 'Keep your temper', the originator of which was certainly not Edmond Hoyle, 'the father of whist', who was mentioned on some of them. The prototype issue from which this series probably derived was produced by Thomason in the 1820's (?) in *Æ* and silver-plated *Æ*, of 1.1 in. diam., showing on obverse a half-length female figure Silence (—whisht!—whist) and a reference to the more recent whist-exponent Thos. Mathews of Bath, and on each reverse one of Mathews's rules of the game.

In 1837 another satirical theme arose, the disappointment of the Duke of Cumberland, as senior surviving son of George III, at succeeding to only the minor of the joint thrones, Great Britain and Hanover. A reverse design concocted on this theme by an unknown wag—showing the duke riding away under the caption TO HANOVER and over a dragon with two or three heads and in exergue the date 1837—inspired a prolific series of counters. Their obverses showed a young head of Queen Victoria and her name and simplified title. In a separate article about the series (see Appendix II) the present writer has traced over forty varieties (more have since come to his notice) as well as thirty other pieces related to them by die-links, &c. Some of the 'To Hanover' counters had an issue date added to the obverse type or substituted for 1837 in the exergue; these dates ranged mainly from 1849 to 1868, and 1879 has also been seen. Quantities in the hands of the public were still so abundant when the St. George and dragon reverse type was revived on some of the sovereigns minted from 1871, that besides having a superficial resemblance the counters—which were about the same size—were soon being passed off as sovereigns; the practice became so rife that the counters were specifically and successfully proscribed by the Counterfeit Medals Act, 1883.

There are also several varieties of smaller 'To Hanover' counters—under the size of a $\frac{1}{2}$ -sovereign—but no clues towards research on them have been found as yet.

Henry Mayhew, the originator of *Punch*, writing in 1851, described¹ counters and other discs sold in the streets in London, and some of his remarks about five kinds of them provide the following particulars:

1. Eight or nine years earlier the magistracy 'put down' the sale of certain gilt card-counters closely resembling a sovereign. (It is hard to tell exactly what these were, as Mayhew distinguished them from the kinds shown below.)
2. Since the issue of half-farthings 'about seven years ago', which had overjoyed the street-sellers—they found them an attractive selling line and charged a penny for four—no regal coinage had been sold in the streets.
3. Until less than five or six years earlier than his account, the usual counters sold were whist markers (with the monarch's head on the obverse and 'KEEP YOUR TEMPER' on the reverse).

¹ *London Life and the London Poor*, vol. i, part i, 349–51.

4. The 'Jacks', i.e. sovereign-sized counters, currently being sold were the 'To Hanover' type; the particular obverse legend on them was VICTORIA REGINA. Mayhew said that the device on the reverse was intended for an imitation of St. George and the dragon; he may genuinely have thought so, or he may have chosen to be discreet about the real origin of the device, or the variety being sold may have been one of those where instead of the burly middle-aged duke the engraver showed a youthful horseman. The number of street-sellers, once twelve, had gone down to two—one in Holborn, the other at Black Tom's in Clerkenwell.
5. The currently sold 'Half Jacks' were not the smaller-sized 'To Hanover' counters but were part of a further series dealt with in the next paragraph.

Queen Victoria's eldest son was born in November 1841, and, as was then customary, was created Prince of Wales the next month; and was christened in January 1842. There promptly arose a series of counters 'the Prince of Wales' model half sovereign' having for obverse the queen's young head, name, and simplified title, and embracing three types of reverse:

- (a) Large device of plumes and coronet, encircled by collar inscribed HONI SOIT QUI MAL Y PENSE
- (b) Horse walking to left with rider on whose headgear the plumes are emphatically depicted; encircled by collar inscribed ICH DIEN and crowned. The rim occupied fully, except at the crown, by legend reading outwards and starting at 11 o'clock: THE PRINCE OF WALES MODEL HALF SOV^{RN}
- (c) Small plumes and coronet with ICH DIEN on ribbons, all within a crowned quasi-collar. Rim legend as in *b* but without line under the small RN.

All specimens have milled edges; some obverses are dated. Pieces in type *a* have been observed thick undated, and thin dated 1843; type *b* is well-made and dated 1849; type *c* occurs well-made with no date and dated 1849, and poorly-made with no date and (thin) with dates 1854, 1863, 1869, 1874, and 1875 observed so far. Mayhew's description accords with type *c* but is silent about any dating; he likewise did not mention seeing a date on 'To Hanover' counters whereas at least the exergue date 1837 was present.

The present writer has recently acquired a larger piece with type *c* reverse but reading THE PRINCE OF WALES MODEL SOV^{RN}.

A further kind of counter, issued in the middle years of the century, showed on one face a fan of playing cards (various combinations from the pack occur) without legend; the other face usually bore the queen's head and legend, some pieces being signed on the truncation 'A & M' (Allen & Moore).

Before further mention is made of particular series, some general aspects need to be examined. The production of minor discs reached maximum intensity from roughly 1840 to 1860/70. In the 1840's the major manufacturers in this trade—Thos. Halliday, Thos. Wells Ingram, and Sir Edward Thomason—all died. Thomason's successor, George Richmond Collis, confined his numismatic activity to medals; Ingram's successor did no diesinking;

Halliday was succeeded by Smith & Hinks, soon James Hinks alone, and diesinking continued under these until about 1855. In place of the older generation many new firms sprang up in Birmingham. Their activities make a fascinating study, which the present writer has essayed in a separate article. Some were shortlived, but regardless of their duration most of them turned out considerable quantities of discs, chiefly advertisement tickets, checks (of concert halls, public houses, &c.), counters, and workmen's tallies; and a great deal of these products bear the makers' names and very often their addresses too. These particulars can provide a valuable starting-point towards the dating of individual pieces, as, besides changes of business style and ownership, makers constantly changed their street addresses from one number to another and from street to street. A striking reflection of this locomotion was the occupation of one particular site successively by no fewer than five of the disc makers; viz. No. 52, St. Paul's Square (Birmingham), occupied:

1846/7–1850/1 by Samuel Hiron. His total period of activity; his local business was acquired by the next occupant.

1851/2–1855 by T. Pope & Co. Established 1848, still operating but not now disc-makers.

1855–1860/2 by Edwin Cottrill. Continued active till 1867/8.

1861/2–1873 by S. A. Daniell. Continued active till the 1940's but not then disc-makers.

then after a lull:

Within 1881–7 by Joseph Taylor & Co., ending their activity begun in 1865 or earlier.

Newhall Street was T. Pope & Co.'s next address for many years and the haunt of various other makers. Thos. Bagshaw, a diesinker and medallist, moved from there about 1840 to Graham Street where for the next thirty years he and three other members of the family in turn ran the business though only H. T. Bagshaw, in charge 1857–64, is known to have made checks and the like.

The Birmingham disc-makers supplied these products to tradesmen and institutions in many parts of the British Isles and themselves belonged to a variety of trades. Those with the highest output were manufacturers of small hand presses for printing and embossing bill-heads and letter-heads; and on many discs they advertised their presses as prominently as the commissioned advertisements. Edwin Cottrill (previously mentioned) claimed, on one disc wholly advertising his own business, that metallic discs like this (he called them 'medals') were cheaper to commission than 'cards', i.e. pasteboard trade cards. Evidently for even greater cheapness, some discs of the period were diestruck on only one face—using stock dies, mostly showing the queen's young head; the blank opposite face was merely punched with abbreviated particulars of the client—e.g. a pair of initials, or initials or name and the name of a public house but no street or town. Other manufacturing trades by which minor discs were vicariously produced during the century, on commission and/or for self-advertisement, were those of: button makers; general brass stampers, brass founders; goldsmiths, refiners of precious metals; stage and

other jewellers; even a firm of truss makers. Some of the general stampers were primarily diesinkers, of products among which they listed 'coins', which could only (?) have meant currency tokens for abroad, e.g. Australia, 'medals', usually connoting trade advertisement tickets, medalets, or counters, and checks, which they sometimes spelt 'cheques'. A check can be defined as a token marked with a value (e.g. 2d., 3d., 6d. were the most common earlier ones), redeemable by the issuer, and circulating only between himself and his individual clients; the issuers were often publicans and/or music-hall proprietors, and redemption was presumably at full value; later on in the century came the more familiar co-operative societies' checks marked with values representing the worth of goods purchased, redemptive value being only a small percentage of the marked value, although Batty also lists checks marked in pence from some of these societies.

The scene in London, so far as the writer has yet probed, seems quite different. During at any rate the middle years of the century, practically all the manufacturing activity here concerned was in the hands of one man, William Joseph Taylor (lived 1802-85), a medallist, &c.¹ who had moved there from Birmingham in 1829; the business ran until 1908.² The principal numismatic activity was retail—marketing of topical medals and probably other discs made in Birmingham and elsewhere, and general coin-dealing; most of the 'medallists' shown in the London directories were simply dealers. Birmingham, in further contrast, seems to have had no coin dealers then.

A large proportion of the farthing-sized discs struck in Victoria's reign had obverses whose generic type was the queen's young head. The commonest legends surrounding the head were VICTORIA REGINA, VICTORIA QUEEN OF GREAT BRIT (OR BRITT OR BRITAIN), H.M.G.M. QUEEN VICTORIA; there was often below the head a date from among the following: 1846, 1847, 1849, 1852, 1853, 1856, 1861 to 1864, 1867, and occasionally others. All the foregoing forms of legend, with possible exception of the one showing BRITT, are existent on medals of the reign dated as far back as 1837-8. Sundry tests (made from the subject-detail, &c. of individual pieces) for whether the seeming stock dates listed above were merely 'frozen dates' or were actual dates of issue have so far tended to prove them to be true issue dates. One contribution to the pool of such evidence is the occurrence of one of the above obverses—H.M.G.M. QUEEN VICTORIA 1867—paired with, *inter alia*, a reverse advertising the Birmingham hatter W. B. Reeves who, as was mentioned earlier on p. 176 under Imitation Spade Guineas, is known to have started business within 1866-8; it may be inferred that his farthing-sized ticket was struck actually in 1867 and, moreover, that this was the precise year of his starting in business. The range of series on which the young head generic type of obverse was used includes the 'To Hanover' and 'P.o.W. Model $\frac{1}{2}$ -sovereign' counters (all varieties of both), most of the Victorian whist markers and counters depicting playing cards, and a fair number of the Victorian issues of the series mentioned in the next paragraph. Usage of this generic obverse had considerably dwindled by the time of the Counterfeit Medals Act (1883) which stopped it and was followed by a revival of the spade

¹ See e.g. C. W. Peck, *B.M.C.*, pp. 221 ff., and Forrer, *infra*, p. 43.

² The dates are taken from Forrer, *B.D.M.* vi. 41-42.

guinea imitations as well as continuation of the then practice of striking tickets not showing any head. Two provocative legends occurred on pieces showing Victoria's young head: THE SOVEREIGN OF CIVILIZATION on certain whist markers;¹ and H.M.G.M. QUEEN VICTORIA SOVEREIGN on a trade ticket.²

By convention dictated by the standard catalogues, the chronological boundary of collectable English currency tokens is drawn before 1820—with few exceptions, such as the piece dated 1821 issued by John King, tobacconist, of London Road, in Southwark—and regal coppers are thenceforth available to fill collectors' trays. Yet there followed until the 1860's a plentiful and fairly homogeneous series of farthing-sized trade tickets which, although not marked with a value (nor was John King's), must be presumed to have had some circulation as farthing tokens. Their variety of trades, localities, and forms is quite as wide and just as interesting a social record as the earlier tokens. A specialized collection can be formed of simply those issued by tea dealers; judging by the large selection available, shopkeepers in this trade must have had directed to them a high-powered and country-wide advertising campaign by the diesinking industry. T. W. Ingram evidently took part in this, using discs of halfpenny size; on some, he supplied a stock obverse indicating the tea and coffee trade and providing a ready-made dealers' slogan, so that when they ordered discs from him he had merely to cut reverse dies showing their name and address. The list published by Batty (ii) is fairly exhaustive. There was also a considerable though less homogeneous series of larger advertising tickets, intermingled with checks, of widely varying diameters. Batty (i and ii) lists a high proportion of the total issues of about halfpenny size existent when he went to press, but many more were struck during the remainder of the century; and of pieces larger than those he lists only a fraction. It seems a great pity that he did not spend more time on them instead of going on to write up the regal copper series (iii and iv) in an unnecessary and inaccurate profusion of detail.

Of the various series mentioned so far, those on which the makers' signatures most often appeared were the advertising tickets and checks. Another signed series was workmen's attendance discs ('time checks'); these tended to be large-sized and were either provided with a large hole near the periphery (for hanging on hooks) or made of annular shape; makers included T. Pope & Co. and H. Jenkins & Sons, both of Birmingham. Then there were market tallies or checks—usually thick, clumsy, and boldly lettered with the name of the market and of the stall-holder, and a very large denomination (in letters and/or figures), 6d., 1s., 2s., &c. They had various shapes of flan: circular, a circle with a portion cut off along a chord, elliptical, square, and others. Of tallies of London markets, such as Covent Garden, Spitalfields, Billingsgate, and the Boro', those observed nearly all bear the signature of Ralph Neal. He entered business in 1867 by taking over, from a diesinker named John Davis, premises at 19 Percival Street, Clerkenwell, London, E.C., which he ran as an office for his nearby works until 1896; then he transferred both functions to 49 and 50 Percival Street, to which No. 48 was added in 1916. His firm returned to No. 19 between 1931 and 1933 until 1937, its final year of existence. His tallies bear on one or both sides, in tiny and

¹ See Batty, ii. 669.

² In the writer's collection.

often-mutilated letters, his name R. NEAL and address at Nos. 49 and 50 or, occasionally, No. 19.

Some halfpenny-sized discs inscribed with scriptural texts were issued, principally a set of 100 showing texts on both faces struck in 1835 by Thomason.

In 1844 Joseph Moore, the well-known Birmingham diesinker and medalist, initiated an idea for lighter-weight copper coins on a small thin flan with a central circular plug of silver to make up the intrinsic value, and produced 1*d.* specimens simulating this. There soon followed large quantities of a similar disc also inscribed ONE PENNY but underneath this the word MODEL, and of a companion HALFPENNY MODEL; and furthermore a small 'model crown' simulating silver with a central circular plug of gold. These pieces were probably all made in Birmingham; they were of base metal with white and gilt coatings to represent the silver and gold. The commoner variety of the model crown bore the signature, as publisher, of H(yam) Hyams; he was a London goldsmith, watch and clock maker, and money changer, last traced at 59 Cornhill in 1852. In 1848 and thereabouts there were some model coins of denominations from 1*d.* right down to one-sixteenth of a farthing (and, allegedly, one thirty-second of a farthing—Batty stated that he had had two specimens but that both were missing when he came to include them in his list; the present existence of any seems difficult to establish); these pieces did not purport to show a combination of two metals, instead they were simply diminutive. (Detailed accounts of the foregoing model pieces and others later in the reign are given elsewhere—see Appendix II.) The Prince of Wales Model Half Sovereign series previously mentioned was also quite distinct.

The diminutive kind of 'model' coins just mentioned is regarded as having served only as toys, and there were other series in this category, as now follow. A set of miniature medalets, of diameters $8\frac{1}{2}$ to $10\frac{1}{2}$ mm., portrayed with names and birth dates Queen Victoria, Prince Albert, and their nine children; Grant lists it under the year 1857, when the ninth was born. Other small medalets on royal subjects in 1888 and 1897 which have come to the writer's attention show a lot of extremely minute inscription. Imitations so inscribed of diameter 13 mm. in base metals of the appropriate colours, including iron with a bright surface to represent silver, were made by the German counters-maker firm, Lauer of Nuremberg, copying the designs of the British regal series under Victoria and Edward VII including all the Victoria young head denominations from half-sovereign to 1*d.* German diesinking is outside the scope of this article, but the relevant point is that one, perhaps the earliest, variety¹ of imitation young head half-sovereign is inscribed on the obverse: L. CHR. LAUER'S MARK COUNTER and this piece was itself imitated in England¹ with the obverse legend changed to: JOHN COOKE AND SONS MARK COUNTER. No such firm is listed in Birmingham, but one bearing this style operated throughout the reign in Cannon Street, London, as stationers and manufacturers of sealing wax and wafers and account books. Cooke's only other traced metallic discs are barbarous imitations in brass with scalloped edges of Venetian zecchino and half-zecchino pieces; the reverse of the latter shows the firm's name in Latin: JOANNES-ILLE-COQVVS-SVI-FILIIQVE. It may perhaps be inferred that these counters were for use in Italy. The other firm mentioned, Lauer,

¹ Specimens in the writer's collection.

evidently exported counters not only for England, as the writer has another Lauer miniature imitation which is of a 20-drachmai piece of George I of Greece, signed by Lauer appropriately in Greek—the obverse legend reads: ΜΙΝΗΣΙΣ Λ.ΧΡ.ΛΑΟΥΕΡ ΝΙΡΝΠΕΡΓ.

To conclude this article, some mention can be made of cylindrical metallic boxes in which certain discs were sold, particularly when these were tiny ones. The Wellington victories set was contained in a tall gilt cylinder depicting his head on the lid. There were simple little boxes about 14 mm. diam. and 3 mm. deep depicting Victorian royalty on the upper portion, and on the lower portion inscriptions such as THE QUEEN'S SCENT BOX, PRINCE ALBERT'S SNUFF BOX; perhaps originally containing the royal family miniature medalets. Whist markers—four alike—were in heavy engine-turned brass boxes with a recessed impression of a whist marker obverse on the lid.

NOTES TO APPENDIX I

1. The table of discs is assembled from entries in Atkins, Batty, Dalton & Hamer, Grant, Neumann, and scrutiny of some specimens. Pieces marked § are also listed in the contemporary (1798) work of Conder (179/13–15, 211/15 and 245/5) (each for one size only; some of these and other pieces in the present table occur in two sizes).

2. Further notes on the makers.

- (a) Directories show many holders of this commonplace pair of initials; selection is impossible. No other lead has been found; possible candidates could include James Bisset (lived 1762–1832) who was then operating in Caroline Street, Birmingham, as a miniature painter and moved by 1797 to New Street where by 1800 he was advertising his 'museum', later adding 'and petrification warehouse' (these forming the subject of his well-known personal tokens, produced by Thos. Wyon the First); on the strength of Forrer's reporting (*B.D.M.* i. 192) that he was also a diesinker (of medals of little merit).
- (b) This person is listed by Grant for the run of calendar medals shown and another medal of 1789. He is not listed by Forrer except covertly for a medal signed 'I. D.' that has somehow crept into the entry for *William Davies* (*B.D.M.* i. 535).
- (c) In the stated years 1788–9 there is no firm of any sort with these initials listed in Birmingham directories; London directories show a single plausible one: John Hume & Co., Army accoutrement makers, 25 Parliament Street, Westminster.
- (d) The 1798 imitation spade guinea is described by NEUMANN (25739) as being signed on one face H K and on the other face H. KETTLE. This confirms the ascription to the Birmingham firm run by Henry Kettle at the time.
- (e) The business then continued under a fresh style, Simcox & Timmins, to whom could be ascribed an 1800 imitation spade guinea signed 'S & T'. (At the same address 'Livery Street' (no street numbers used) a presumably related firm of brassfounders changed its style at the same time from George Simcox & Co. to Simcox & Pemberton.)
- (f) The initials can plausibly be ascribed to the sole Birmingham firm bearing them at the time: Wilmore, Alston & Co., buckle and button makers, Bread Street, Newmarket (Street), Birmingham (active from 1781/5). (The business began about 1780, as Wilmore & Alston; from about 1790 (still in Bread Street) it became Thos. Wilmore & Son, trading as silver-smiths.)

APPENDIX I

ANALYSIS OF DATES ON THE TOTAL ASCERTAINED PRODUCTS OF SIX DISC-MAKERS,
AS EVIDENCE THAT SPADE GUINEAS WERE FIRST IMITATED WHILE BEING ISSUED

IDENTIFICATION OF
THE MAKERS AS FUR-
THER EVIDENCE

Signatures	Products bearing these signatures							Range of dates in preceding cols.	Name and trade	Town and period of activity
	Calendar medals	Imitation Spade guineas and halves	Medalets							
			'Glorious Revolution' centenary 1788	George III's			Other historical, &c. subjects			
				Mental recovery	Worcester visit 1788	Other visits &c.				
I.B. Davies, J. D., I.D., a cock with I.D., Da with J.D. }	.. 1783-98 (most years)	1788 1788, 1789, 1792, 1794, 1797. (On guineas Davies except 1789 I.D. On ½-gns. various of the signatures.)	.. +	.. 1789	+\$ +\$ (Davies)	.. 1789	.. ..	1788 only 1783-98	Uncertain ^a James Davies button-maker ^b	Birmingham c. 1780-98
I. H. & Co. } J. H. & Co. }	1789	+	..	..	1788-9	Uncertain ^c	
C.I., C.J.	+ (James)	1788 1789§	+	1788 1789	1789	1788-9	Charles James medallist and token-engraver	Birmingham .. 1787 . . ; then London .. 1816
Kettle ^d	..	1792-4, 1797, 1798, 1802 (!) also garter type ½ gn. 1801	..	..	..	..	1801, 1809, 1810, 1814. Also 1820, 1830	1792-1814 1820-30	Henry Kettle button and buckle maker One of his sons	Birmingham 1781/5-1812/14. Continued the B'ham family business.
Simcox	..	1791-6	..	..	..	..	..	1791-6	George Simcox buckle and toy maker	Birmingham .. 1790-6/1799 ^e
W.A. & Co.	..	1788, 1791 (In this column some of the issues of the second and the seventh maker had scalloped edges.)	..	1788 1789§	+\$ (All pieces in this column had scalloped edges.)	..	undated	1788-91	Uncertain ^f	

APPENDIX II

BIBLIOGRAPHY AND REFERENCES

Specialized articles about minor discs

- | | | |
|--|------------------------|---|
| Catalogue embracing many kinds of discs in 1 <i>d.</i> , $\frac{1}{2}$ <i>d.</i> , and $\frac{1}{4}$ <i>d.</i> sizes; especially useful for nineteenth century trade tickets and (see below) counters, &c. | D. T. Batty | <i>Catalogue of the Copper Coinage of Great Britain, Ireland, British Isles, and Colonies, Local and Private Tokens, Jettons, etc.</i> i and ii only, 1868–84. |
| Calendar medals | Melvin and George Fuld | 'Calendar Medals and Store Cards', <i>Numismatist</i> , Jan. 1955 . . . Nov. 1959. |
| Model coins | S. R. Yarwood | 'Model Coins', <i>Seaby's Bulletin</i> , 1957, 342–5. |
| 'To Hanover' counters (incl. catalogue) | The present writer | 'To Hanover' Counters, <i>Num. Chron.</i> 6, xix, 1959, 203–30 and pl. xix. |
| Manufacturers and their products | „ | <i>Dictionary of Birmingham Makers of metallic Tickets, Checks and Counters during the middle and latter parts of the 19th Century.</i>
<i>Seaby's Bulletin</i> , 1960 (Mar.–June, Aug., Oct.). Includes (Intro. and App. I) guide to layout of Batty, i–ii. |
| Imitations of Spade guineas—catalogue | „ | Compilation in progress. |
- Other references—partial lists of particular series, &c.*
- | | | |
|---|---|--|
| Manufacturers, diesinkers, engravers | L. Forrer | <i>Biographical Dictionary of Medallists, Coin-, Gem-, and Seal-Engravers, Mint-Masters, &c. Ancient and Modern</i> , with references to their works. i–viii, 1904–30. |
| Calendar medals (listed among other medals under year of issue) | Col. M. H. Grant | 'Catalogue of British Medals since 1760', <i>B.N.J.</i> xxii–xxiii, 1936–41. |
| Card counters | | |
| depicting playing cards | { C. I. Bushnell
Batty, <i>supra</i> | <i>U.S. Tradesmen's Cards and Political Tokens</i> , 1858 (for a few).
ii. 667–71, &c. |
| whist markers | „ | ii. 557, 665–72, 698, &c.; (Thomason's) ii. 458–9. |

Co-operative societies' checks	Batty, <i>supra</i>	ii. 203, 541, 596, &c.
Guinea and $\frac{1}{2}$ gn. imitations		
Geo. III first type	„	ii. 415-17, 674-6.
Spade type	„	i. 261, 267, &c.; ii. 415-17, 475, 674-9.
Model coins initiated by Jos. Moore	C. W. Peck	<i>B.M.C. English Copper, Tin and Bronze Coins in the British Museum 1558-1958</i> , 481 ff.
Prince of Wales' model $\frac{1}{2}$ -sovereign	Batty, <i>supra</i>	ii. 704, no. 4135 (type a). (Batty's listing of minor discs shows considerable gaps on this last page, perhaps as a consequence of the Counterfeit Medals Act passed in the previous year. He lists no more pieces of the above kind, and no true-to-type 'To Hanover' counters at all excepting one published earlier (in 1878)—ii, no. 4912K—in his section on halfpenny-sized pieces.)
Scriptural texts	„	ii. 478-82.
Wellington's victories (miniature medalets)	„	ii. 657-8, 661, 692, 694, 701, 703.
Miscellaneous:	W. J. Davis	<i>Tickets and Passes of Great Britain and Ireland</i> , 1931.
Tickets of schools, societies, theatres, workmen's tallies, &c., &c.	and A. W. Waters	
Tradesmen's tickets, counters	J. Neumann	<i>Beschreibung der bekanntesten Kupfermünzen</i> , iv (1865).

NOTE. References are to page numbers except where prefixed 'no.'.

MISCELLANEA

THE COINS OF THE SUSSEX MINTS: ADDENDA AND CORRIGENDA

HASTINGS

- EDWARD THE CONFESSOR, type *B.M.C.* vii, Brooke 6
109. For 'As no. 108' read 'Same die as no. 108'.
Delete 'Sceptre ends in fleur-de-lis'.
110. Delete reference to footnote.
- 110a. Delete 'but no pellet'.
- 110b. As no. 103 but different die from it and no. 110.
Same die as no. 110.

LEWES

- ÆTHELRED II, type *B.M.C.* iva: Hild. D
43. For M' O read M' ⊙.
- CNUT, type *B.M.C.* viii: Hild. E
133. For L:ÆE: read LÆE.
134. For 'As no. 133' read +L ODMAN L:ÆE:.
- 139a. For ANGLORVI read ANGLLOVI.
- 149b. For PVL FHEH MM read PVL FEH :MM.
- EDWARD THE CONFESSOR, type *B.M.C.* xi: Brooke 8
261. Delete pellet at end of *obv.* legend.

My attention has been called to some of these errors by Mr. P. A. Hodgkinson.

HORACE H. KING

A NEW MINT FOR STEPHEN TYPE 7

THE coin described below, now in my collection and illustrated here (Pl. XI. 5), was exhibited by me at the Anniversary Meeting of the Society on 30 November 1960.

It seems to be quite 'new' and unpublished and certainly I had no knowledge of its existence at the time of writing my Paper on this type.¹

It is of perfectly regular style with the large, well-formed lettering which is characteristic of the type, including a very peculiar form of the letter 'P', virtually indistinguishable from 'D', which is found on many of the coins.²

The readings are:

Obv. +STIEFNE

Rev. +RÄP[V]L:ON:RIEE:

Although the first letter of the mint-signature is not very distinct I have no hesitation in reading it as R and, consequently, assigning the coin to the mint of Rye

¹ *B.N.J.* xxviii (1958), pp. 537-54.

² This letter form which is peculiar to this type, although much the same feature is to be observed on a few late coins of Edward the Confessor, is not reproduced in Brooke's Epigraphical Table in *B.M.C.* (*Norman Kings*). Classic examples of it occur on the two coins nos. 12 and 13 figured on Pl. LVI of vol. 1 of *Norman Kings*.

where the moneyer RAWVLF (an early form of the name) is already known. Hitherto Rye, one of the rarest of the Norman mints, has only been known in Stephen Type 2 and that from as few as five specimens. These are all from different dies and are all by the moneyer Ralf using the two alternative spellings of RAPVL and RAPVLF and the mint-signature RIE.¹

Incidentally it may be of interest to mention the fact that the late W. J. Andrew recorded a coin of this mint and reign (but of Type 1) by a moneyer WILLEM with this exact spelling of the mint-signature (RIEE) but it is virtually certain that this attribution is based on a misreading and that the coin in question is a myth. At any rate if the coin does exist its present whereabouts are unknown and it has not appeared in any sale catalogue that I have seen.²

F. ELMORE JONES

TWO MEDIEVAL FINDS FROM SOUTH WILTSHIRE

IN 1959 Mr. Wilfred Thorne of Castle Hill, Alvediston, found a silver coin (D. 18.5 mm., Wt. 15.75 gr.) in his cottage garden, almost on the border of the neighbouring parish of Ebbesbourne Wake. The coin proved to be a sterling of Arnold D'Orey, Lord of Rummen, 1331-64, and the finder kindly presented it to the Salisbury Museum (acc. 34/59) (Pl. XI, 7). It is mentioned on page 18 of the museum's *Annual Report*, 1959.

The coin appears to be sufficiently rare to merit publication, there being no example in the British Museum collection. The type is mentioned by Chautard on page 94 of *Imitations des Monnaies au Type Esterlin*, Nancy 1872, nos. 159 and 160, and these are engraved on Pl. XIII, nos. 2 and 3, but both coins show minor differences from the present specimen and the standard of engraving hardly permits detailed comparison. Arnold's long reign would, however, presuppose a number of issues and the rarity of his coins is correspondingly remarkable.

The type is copied directly from the coins of Edward II or the early years of Edward III. On the obverse the head is somewhat long and thin and there is a collar round the neck. The hair is drawn in three overlapping locks on each side and the treatment is simpler than in most of the English prototypes. The crown, beneath which a fringe appears, is seen in perspective but the ornaments between the fleurs-de-lis are diamond shaped and while almost separated from the crown are in conjunction with the central lis. The initial-mark is a cross pattée and the legend, in Lombardic characters, reads **ERNWUDVS DOMVRVS**, the **V** being almost obliterated. The reverse has no initial-mark, but three pellets in each quarter and the legend: **MON-ET-RVM-INOR**, indicating Rummen as the mint-town. Throughout the legend the **M**'s are of noticeably Roman form while the **R**'s conform to the Lombardic character of the inscription as a whole.

Another medieval find was made about 1948 in the north-east corner of the Council House grounds in Salisbury, which probably belonged to the collegiate church of St. Edmund until the sixteenth century. It is an English bronze coin-weight (D. 18 mm. and 2 mm. thick. Wt. 101.5 gr., Pl. XI, 8). It was kindly given to Salisbury Museum (acc. 96/58) by Doctor Peter Greenstreet of Wilton. It is mentioned on page 18 of the *Annual Report*, 1959, and illustrated in a line-drawing at twice natural size on the front cover. The weight is circular, and plain as usual on the reverse. The obverse type is within a border which is plain on the inner and scalloped on the outer side. The design consists of the usual warship, an echo of the

¹ H. H. King, 'The Coins of the Sussex Mints', *B.N.J.* xxviii (1956), p. 74.

² Messrs. Spink & Son's *Numismatic Circular*, Feb. 1931, p. 69.

design on the gold coins it was intended to weigh. The ship's hull is formed of four crescentic lines. The forecastle is pointed and the poop square, each being decorated along the side by three diminutive trefoils. The single mast is supported by four mainstays which are attached below the fighting top. Above this a pennon flies to the right from the upper part of the mast. In the right field is a leopard and above it what appears to be an abortive attempt at a second leopard, partly off flan and partly confused with the pennon. On the left is a fleur-de-lis.

Medieval English coin-weights are far from common and this one is not recorded by Dieudonné in his *Manuel des Poids Monétaires* (1925) though he illustrates six examples of the warship type. The pointing of the bows in this example is a refinement hardly found in the coinage till the reign of Henry VII, yet the present weight of this rather worn piece suggests that it was for testing the nobles of 108 grains struck by Henry IV and his successors from 1412 until 1464 in the fourth year of Edward IV. It is not improbable that gold coins of varying weights remained current long after the introduction of coins with new names and different standards and so it is possible that a coin-weight such as this was struck by Henry VII to weigh nobles which had not been struck for twenty-five years.

H. DE S. SHORTT

A UNIQUE PENNY OF HENRY IV AND A NEW HALFPENNY OF HENRY VII

THESE two previously unrecorded coins have recently come to light and, although I have no doubt that they will be discussed and commented on elsewhere, I feel that a description of the pieces should be recorded.

I. HENRY IV, LIGHT COINAGE, PENNY OF LONDON. Weight 15 grains.

Obv. +HÆNRIC·REX·ANGLIÆ, pellet to left, annulet to right of crown, slipped trefoil on breast.

Rev. CIVI·TAS·LON·DON, no stops. (Fig. 1.)



FIG. 1
(×2)

The obverse lettering is of the usual style for this period, being neat, small and having the distinctive split or 'fish-tail' serifs; the crown too is of the normal flattish form found on Henry's coins, but the style and general neatness of the bust is reminiscent of the heavy pennies and even of the late coins of Richard II. Two features which distinguish this coin and which set it apart from all the other known London pennies are: on the obverse, the pellet to left and the annulet to the right

of the crown, an arrangement which is exactly opposite to that usually found. On the reverse, the use of Lombardic **N**'s instead of Roman **N**'s.

Of the three pennies with Lombardic **N**'s described by F. A. Walters in 'The Coinage of Henry IV' (*Num. Chron.* 1905) his numbers 2 and 4 both appear to have a regular Henry V reverse and his number 5 is so different in style of lettering, stopping, bust, and crown that it may well be an early coin of Henry V also.

The use of Lombardic **N**'s is quite usual on the heavy coins, and it is therefore not impossible that the reverse die was originally intended (and possibly used) for the heavy pennies. On p. 135 of this journal this coin will be found listed in the paper by W. J. W. Potter, who discusses its probable place and date amongst Henry's light coins.

II. HENRY VII, CANTERBURY HALFPENNY OF ARCHBISHOP MORTON.

Obv. **Hen[RIC·D]I·GRÆ REX.** Legend preceded by four horizontal lines.
Saltires by bust, single arched crown.

Rev. **CIVI[TAS][CAN[T]OR, Ω** in centre. (Fig. 3.)



FIG. 2.

FIG. 3.
(All enlarged $\times 2$)

FIG. 4

Although this coin is not published, Dr. Brooke in his *English Coins* describes the known halfpenny of Archbishop Morton with an **Ω** on the reverse, as follows:

Group I—Open crown; early lettering **Ω** in the centre of the reverse, no initial-mark (?). (Fig. 2.)

He then goes on to describe the coins of Group III which are attributed to the king and Archbishop Morton for the period 1495–1500 (?) and whose characteristics are: arched crown, ornate lettering, lis initial-mark (rosette stops); no initial-mark (saltire stops), but no **Ω** in the centre.

The present coin, differing only from Group I by having an arched crown, is therefore the missing Group II coin. Interesting though this coin is for the completion and justification of Dr. Brooke's classification of this series, the most interesting feature of the new piece is the mark before the king's name. To the best of my knowledge this is the first time that this mark has been positively identified in the place of a normal initial-mark on the obverse of any of Archbishop Morton's coins. I have only so far been able to trace one other specimen, in the Raymond Carlyon-Britton collection (Fig. 4), which was not recognized by him for what it was, due

to extensive surface corrosion, and it was not until we had this coin drastically cleaned that I was able to identify it as belonging to this series. The mark on this coin is now just discernible, but it is not possible to recognize it on the specimen in the British Museum which has an unarched crown.

The mark (and I use the term 'mark' as opposed to initial-mark) is known on some of the half-groats which are classified by Brooke as follows:

Archbishop Morton, 1486–1500, Type I, open crown without arches, tun initial mark, Ω (Lombardic) in centre of reverse. Crosses by bust. Some have a radiate eye after Posui (Brooke, pl. 27, 9).

Type II, double arched crown. Otherwise similar to last but with no initial-mark. The eye is placed before and after Posui and occasionally after Gra.

The half-groat illustrated here for comparison is of the latter class (Fig. 5).



FIG. 5. (Actual size)

The mark radiate eye (or eye in profile) has never been considered exclusively as an initial-mark due to its previously being unknown on the obverse before the king's name, although it is known in the place of an initial-mark on the reverse, but it is also found at other places in the legends.

It is also a matter of speculation whether the mark is a degraded form of eye in profile, the horizontal strokes representing the eye-lashes. Having now this half-penny on which the mark appears, a more intensive study of the Canterbury coins as a whole would not come amiss.

P. FRANK PURVEY

A NEW VARIETY OF THE QUARTER-NOBLE OF HENRY V

A MORE careful examination of a Henry V quarter-noble in the Fitzwilliam Museum at Cambridge reveals a hitherto unknown variety which deserves to be recorded, and this is the object of this note.

The coin in question reads:

Obv. HENRIC·DI·GRA·REX·ANG·S·F

Lis above, quatrefoil and annulet on each side of the shield. Initial cross worn and sunken annulet not visible.

Rev. EXALTABITVR·IN·GLORIA

Initial cross with sunken annulet.

Nothing unusual here, as these are the legends of the few existing specimens of that period; but reference to Brooke—and his brilliant though somewhat abstruse study, published in the *Numismatic Chronicle* as long ago as 1930, still remains the authority on this period—indicates some unusual features, see **Pl. XI, 6**. They can be summarized as follows:

Obv. 1. The large trefoils on the points of the tressures indicate that the coin must be placed between Group I and IVa, since die IVb has annulets on the points of the tressures, and this feature continues during the remaining quarter-nobles of the reign.

2. The lettering is later than no. 1 or 1a—the absence of the squat N (Group I) and of the peculiar I of 1a (Group II) prove this—and yet the small C, E, and I of the regular no. 2 lettering show that the coin must be earlier than Group IV. It follows, therefore, that it belongs to Group III.

Rev. 1. The trefoils in the angles of the central panel and the regular no. 2 lettering with small E and I indicate a coin of Group III, known to Brooke only as a mule IV2 × IIIa, then in the Lockett collection, and sold as lot 3082 in Part VII of the Lockett sale on 5 November 1958.

From the above it appears that the coin in question is in fact a specimen of a true Group III, which had previously not been known for the quarter-nobles, and I am indebted to the Director of the Fitzwilliam Museum for permission to reproduce the above details and to Mr. Graham Pollard for supplying a cast of the coin in question.

A second example of the above coin has subsequently turned up in the collection of H. Schneider Esq. ex Dangar sale, 15 April 1953, part of lot 95, and is indeed a die duplicate. On this specimen the initial cross with sunken annulet on the obverse is clearly visible.

D. MANGAKIS

EDWARD COINS WITH OBVERSE MINT-MARK SUN AND ROSE DIMIDIATED

As a novice in the field of numismatics I submit, with diffidence, these notes on a subject which on paper represents an unresolved question.

Mr. Blunt and the late Mr. Whitton, in articles published in this Journal, reached the conclusion that these coins should be attributed to the reign of Edward IV. Among dissentients from this view was the late Dr. Arnold whose paper was the last on the subject to appear in this Journal. In the 1950 Presidential Address Mr. Blunt summed up (magnanimously, may I suggest?) in terms that the matter was far from settled.

Subsequently Mr. Stewart, writing in Seaby's *Bulletin* in December 1954, assembled the pros and cons from the articles and in conclusion gave his own verdict to Edward IV; Mr. Potter, in Seaby's *Bulletin* of April 1956, doubted this attribution; and Messrs. Spink & Son in the *Numismatic Circular* of December 1958 noted that modern opinion gives these coins to Edward IV.

There the matter appears to rest.

Now it would be impertinent for me to claim discovery of any new evidence on the subject. What I have attempted, however, is a collation of certain items of statistical evidence scattered among the articles and forming one of their themes. The result seemingly disposes of points made by Dr. Arnold and Mr. Potter.

With the following well established attributions safely behind us, namely:

- (i) mint-mark heraldic cinquefoil—to a late phase of Edward IV's reign
- (ii) mint-mark boar's head, struck over sun and rose dimidiated—to Edward V's short reign

we are left with the intermediate mark, that is, the unaltered sun and rose dimidiated.

The quantities of bullion recorded as having been struck during the crucial period are:

		<i>M/M</i>	<i>Gold</i> lb.	<i>Silver</i> lb.
Oct. to Dec.	1482 (Edw. IV)	Cinquefoil	97.1	14.2
Jan.	1483	—	nil	nil
12 Feb. to 9 Apr.	1483 "	?	141.8	573.6
May and June	1483 (Edw. V)	Boar's head	49.10	434.3

If we now consider these figures in relation to the number of known obverse dies for angels and groats (small coins of both metals being assumed as negligible in amount), namely:

	<i>Angels</i> (Minimum number of dies)	<i>Groats</i>
Sun and rose—not known overstruck boar's head	5	6
Boar's head—struck over sun and rose	2	5
Total = known 'original' sun and rose dies	<u>7</u>	<u>11</u>

we find an arithmetical consistency between the two sets of figures which strikingly suggests the attribution of the sun and rose coins to the period February to April 1483.

Moreover these figures are in line with an estimate which has been made that, on average, one obverse die in the silver accounted for around 100 lb. of coin during this period of our history. (As greater care would have had to be taken with the gold one die could well have accounted for something like 25 lb.)

Reverting now to Dr. Arnold's paper, he argued—on page 169 of vol. xxvi of this Journal—that, in the face of average annual bullion outputs of 1,750 lb. of gold and 6,800 lb. of silver during the second reign of Edward IV, the rare sun and rose coins if ascribed to that king could have been issued only in 'the very last few days' of his reign. The detailed figures, of which Dr. Arnold was evidently unaware, indicate the critical time to have been the last eight weeks of the reign.

Mr. Potter in his paper commented that as the 434 lb. of silver struck in May and June 1483 were little less than the total of 587 lb. from Michaelmas 1482 to Edward IV's death 'it is no more difficult to account for the number of sun and rose dies in the two months May/June than in the two months from Feb. 12th to April 9th. . . .' This line of reasoning would have had some validity if the 587 lb. had been spread fairly evenly over the six months to April, but in fact all except a mere 14 lb. of it was concentrated in the two months from February to 9 April. However, I believe that Mr. Potter is now of a different mind.

The modest revival of mint activity in February 1483 coincided with the appointment of a new mintmaster—Bartholomew Reed—under the Indenture of the 12th of that month, and it does not seem difficult to accept that in this particular instance a new indenture heralded a new mint-mark. Other changes associated with the sun and rose coins, e.g. a revision of the privy marking system and the virtual cessation of muling, may likewise be reasonably ascribed to the advent of the new mintmaster.

Information on reverse dies has not been gathered but, however interesting, would not be expected to affect the inference drawn.

May I add that the figures quoted are not intended to demonstrate necessarily that *all* the 'unaltered' sun and rose coins occurred in the reign of Edward IV. On the contrary, some may well have continued to be struck during that of Edward V. To establish that at least *some* of these coins were minted before the death of Edward IV is all that is needed to justify the attribution of the mark to him.

At the heart of this whole matter, I would submit, lies a remarkable coincidence—that the very small issue of coins in the brief reign of Edward V was preceded by a

new issue which happened also to be small by reason of occurring in the closing weeks of the previous reign.

Perhaps a note may be added on an apparent error in the late Mr. Whitton's paper 'Die Links between Edward IV, Edward V, and Richard III'.

On page 177 of vol. xxiv of the *Journal*, Mr. Whitton says of the angels (line 3): 'One reverse die with R over E and rose is found with three different obverse dies, one of Edward IV with I. M. Sun-and-Rose, one of Edward V with I. M. Boar's Head over Sun-and-Rose, and one reading RICARD with Boar's Head. . .'

From the evidence supplied in Mr. Blunt's article (vol. xxii, p. 213), and from Mr. Whitton's table of die links in the angels appearing on the next page (178) after his above-mentioned quotation [and the table on p. 187—Mr. Winstanley] it seems clear that the 'three different obverse dies' should read: 'one of Edward V with I. M. Boar's Head over Sun-and-Rose, one reading RICARD with I. M. Sun-and-Rose and one reading RICARD with Boar's Head. . .'

F. M. STUBBS

ENGLISH COPPER, TIN AND BRONZE COINS IN THE BRITISH MUSEUM

ADDENDA AND CORRIGENDA

DESPITE the utmost care it happens only very occasionally that a book of a technical nature reaches its readers entirely free from errors, due either to oversights in the proof-reading or to printing errors made after the final proofs have been passed.

My catalogue—*English Copper, Tin and Bronze Coins in the British Museum*—proves to be no exception, and I am glad to have this opportunity of recording a number of omissions and corrections that have come to my notice.

That several unrecorded pieces should turn up was not unexpected—especially from the U.S.A.—but there was always a lurking fear that some discovery might upset the original classifications. It was encouraging therefore to find that none of the new pieces caused any complications. Of the errors, fortunately only one is at all serious, viz.: the transposition that occurred on p. 187, lines 3 and 4, and which necessitates changing Bust A into Bust B, and vice versa, wherever they occur on that page.

ADDENDA

I am indebted to the following collectors for drawing my attention to the omissions listed below and for lending me the pieces for examination:

Mr. J. M. Ashby—no. 1; Mr. W. T. Butler—no. 7; Mr. R. N. P. Hawkins—nos. 4, 8, and 9; Mrs. E. M. Norweb, of Cleveland, Ohio—nos. 2, 3, 5, and 6; Mr. D. L. F. Sealy—nos. 10 and 11; Mr. J. Gavin Scott—no. 12.

1. p. 162. *Add No.* 603A, 1694—'MVR1A' [ER].
2. p. 164. *Add No.* 628A, *Silver*—normal legends and stops. [ER].
3. p. 290. *Add No.* 1076A, *Copper*—thin, 3 to 3.5 mm. flan. [ER].
4. p. 298. *Add No.* 1094A, *Copper*—thin flan. [ER].
5. p. 327. *Add No.* 1205A, *Silver*—[ER].
6. p. 344. *Add No.* 1258A, *Aluminium*—[ER].
7. p. 430. *Add No.* 1741A, 1889—*Bronze proof*. As *Obv.* 8, but only 14 leaves (3+3+3+3+2) [EXR].
8. p. 443. *Add No.* 1890A, 3+C—small date figures [R].

9. p. 482. *Add* No. 2092A, As No. 2092, but *obv.* reads PENNEY [EXR].
 10. p. 504. *Add* No. 2246A, 1913—2+A [VS].
 11. p. 527. *Add* No. 2520A, 1953—1+B—normal issue (?) [S].
 12. p. 527. *Add* No. 2520B, 1953—2+A—normal issue [S].
 Of the above the 1889 penny is the most interesting and unexpected.

CORRIGENDA

- p. 15. Footnote 3: *for* 'half-groat' *read* 'groat'
 p. 103. Line 22: *for* '(nos. 375-96)' *read* '(nos. 375-86)'
 p. 116. Line 12: *Add* a stop after CAROLO
 p. 117. Line 11: *for* 'All the recorded specimens' *read* 'Most specimens'
 p. 136. Footnote 1, line 4: *read* 'to be delivered'
 p. 165. Line 3 from bottom: *for* 'duely' *read* 'duly'
 p. 187. Line 3: *for* 'Obvs. 1, 3, and 4' *read* 'Obvs. 2 and 5'
 p. 187. Line 4: *for* 'Obvs. 2 and 5' *read* 'Obvs. 1, 3, and 4'
 p. 187. Line 6: *for* 'Bust A' *read* 'Bust B'
 p. 187. Line 10: *for* 'Bust B' *read* 'Bust A'
 p. 187. Line 14: *for* 'Bust A' *read* 'Bust B'
 p. 187. Line 18: *for* 'Bust A' *read* 'Bust B'
 p. 187. Line 24: *for* 'Bust B' *read* 'Bust A'
 p. 194. Line 2 from bottom: *for* 'Dia.: 24 mm' *read* 'Dia.: 22 to 24 mm'
 p. 194. Last line, No. 767: *for* 'P⁶' *read* 'P(2)⁶'.
 p. 194. Footnote 6 *should now read* '80.9 gr. (Pl. 13. 767d), and 66.4 gr.'
 p. 195. First line: *for* 'four specimens' *read* 'five specimens'
 p. 212. Line 10 from bottom: *for* '&' *read* '&c.'
 p. 228. Line 13 from bottom: *for* '475' *read* '479'
 p. 274. Line 9 from bottom: *for* 'Pl. 19. 1028' *read* 'Pl. 19. R 32'
 p. 275. Line 2: *for* 'Pl. 19. 1031' *read* 'Pl. 19. R 35'
 p. 275. Line 11: *for* 'Pl. 19. 1035' *read* 'Pl. 19. R 37'
 p. 304. Footnote 1: *read* 'R. N. P. Hawkins'
 p. 306. No. 1131: *for* 'N' *read* 'Na'
 p. 407. No. 1493: *for* :— *read* —:
 p. 408. Line 6: *for* 'W.W.' *read* 'W:W.'
 p. 441. Footnote 2: *for* 'no specimen yet traced' *read* 'M. Posner Collection'
 p. 456. Line 4: *for* 'As Obv. 1' *read* 'As Rev. 1'
 p. 487. Line 16: *for* 'back of the neck' *read* 'side of the neck'
 p. 504. No. 2265: *for* [ER] *read* [VS]
 p. 525. Footnote 1: omit '(and farthings)'
 p. 525. Line 4 from bottom: *for* 'Five revs.' *read* 'Six revs.'
 p. 527. No. 2521: *for* '[S]' *read* '[VC]'
 p. 532. No. *7: *for* 'Vauhgán' *read* 'Vaughan'
 p. 545. No. 677: *for* 'H. D. Collection' *read* 'H. D. Davis Collection'
 p. 633. Pl. 16 H: *for* 'Pl. 13. 733' *read* 'Pl. 13. 736'
 p. 633. Pl. 16 I: *for* 'Pl. 13. 736' *read* 'Pl. 13. 733'

C. WILSON PECK

REVIEWS

Commentationes de Nummis Saeculorum IX-XI in Suecia Repertis, Pars Prima (Kungl. Vitterhets Historie och Antikvitets Akademiens Handlingar, Antikvariska Serien 9)—Stockholm, 1961. Price kr. 85.

ANYONE who has the opportunity of spending a period of time in the Royal Coin Cabinet in Stockholm cannot fail to be impressed by the wealth of material which exists there from Viking-Age coin-hoards found in Sweden, and particularly in Gotland. The publication of this material is a task of immense magnitude, and the preliminary work is now being undertaken under the auspices of the Royal Swedish Academy by scholars from Germany and Britain as well as from Sweden itself. Naturally the intensive study of so much material is throwing new light on the coinages which are represented in profusion in the Swedish hoards, and this volume is the first of a series in which the results of specific studies are being published as an essential preliminary to the publication of the hoards themselves.

This first volume extends to 376 pages and, in addition to 13 plates, includes numerous illustrations and diagrams. The quality of its production is excellent. With the exception of a paper in German by Vera Hatz on the Otto-Adelheid coinage, the text is in English.

Students of the Anglo-Saxon series will find much of interest in this volume. Dr. N. L. Rasmusson, in an introduction, discusses the sources of the coins deposited in Sweden in the period under review, and the reasons which have been advanced for their deposit. He also explains the basis on which the Academy is proceeding with its plans for the publication of the hoards. A very important contribution on the Norwegian coinage of the eleventh century, by another Swedish scholar, Brita Malmer, is also of wider application as an example of modern methods of classification of barbarous anonymous coinages. In this study she examines letter forms and other decorative elements, size of flan, weight, diameter, thickness, silver content, and die-axis. These are analysed statistically, those that are capable of measurement being subjected to well-known statistical methods: the decorative elements, however, are analysed by correlation diagrams, a technique which enables numerical results to be assembled and examined visually and, in favourable conditions, a probable chronology to be determined. This technique may well repay further study and development: without knowledge of the series and access to Mrs. Malmer's material it is difficult to judge its efficacy in this case.

The three papers on the Anglo-Saxon series are contributed by R. H. M. Dolley. These papers do not include the results of Mr. Dolley's most recent research in Stockholm, and such is the pace of modern progress in this field that his first paper, 'The Relevance of Obverse Die-Links to some Problems of the later Anglo-Saxon Coinage', has had to be brought up to date by an appendix. This does not detract in any way from the usefulness of the paper as an exposition of the importance of obverse die-links between mints in solving problems of location of doubtful mints.

The Benediction Hand issue of Æthelræd II is discussed in a paper of which F. Elmore Jones is co-author. The authors argue that this issue was a variety of the Second Hand type and was transitional between that and the prolific Crux type. Die-links prove that the Benediction Hand issue immediately preceded the Crux type, and certain obverse dies used with Benediction Hand reverses are very closely related stylistically to obverses of the Second Hand type, so that the chronology seems proved beyond reasonable doubt: the rarity of coins of this issue leaves little

doubt, too, that it was an issue of short duration. The authors treat their subject exhaustively, though they appear to overlook the reverse die-link between the Rochester coins illustrated in Fig. 2 and Fig. 3.

In the third paper, 'Some Thoughts on the Engraving of the Dies for the English Coinage c. 1025', in which Mr. Dolley is joined by Miss J. Ingold, a detailed study of the Pointed Helmet type of Cnut is made. The design of this type is such that a basis on which the dies used can be classified stylistically is less apparent than in the case of the Last Small Cross and Quatrefoil types. The basis of classification which the authors have devised is, for this reason, not particularly convincing at first sight. The division between coins reading REX and those reading RECX is obvious and is the simplest criterion for distinguishing the authors' two main styles—the former being found on most coins allotted to their Style III and the latter on most assigned to Style II. The difference in spelling might be expected to be chronological, since the form REX is found exclusively in the Quatrefoil type and the form RECX in the Short Cross type, but the authors argue a case for the two spellings having been in use simultaneously. The two main styles are subdivided on the basis of minor differences in the treatment of the 'lap' of the helmet, and the authors suggest that these differences may have chronological significance. Their conclusion that the die-cutting is sufficiently homogeneous within each style for the two styles to have been substantially the work of only two die-cutters does not appear to be fully supported by the coins illustrated, *vide* Pl. II, 2 and Pl. V, 3; and were it not for the difference in the spelling of 'Rex' the allocation of certain coins (e.g. Pl. I, 4 and Pl. IV, 1) to one style or the other would seem to depend only on whether the head of the sceptre is made of three or of four pellets. Again, one of the characteristics said to be found on 95 per cent. of the coins of Style II is the straight-backed helmet illustrated in Fig. 1 A: yet of fourteen coins of this style illustrated in the plates, on no fewer than seven the helmet appears to take the form illustrated in Fig. 1 B, which is characteristic of Style III. Close examination of the coins illustrated, particularly of Style III, suggests that differences in epigraphy have also been overlooked. In the reviewer's opinion, the authors' case must be regarded for the present as not proven, and it is to be hoped that they will re-examine the problem of the classification of this difficult and critical type at a later date. In particular, a reconciliation between the decentralization of die-cutting which is a feature of the Quatrefoil type, and the centralization which is found in the Short Cross and subsequent types, should be an essential feature of any future study of the Pointed Helmet type. It should not be an impossible task to determine, with an error of only two or three years, at what stage in the centralizing process each of the provincial die-cutting centres was closed down, and this should be the primary objective of such a study.

In addition to the papers mentioned, the volume also contains an extensive study by Ulla S. Linder Welin on the reign of Sayf ad-dawlah in Syria and Diyarbekr in the tenth century.

C. S. S. L.

English Hammered Coinage, Vol. 2: *Edward I to Charles II, 1272–1662*. By J. J. NORTH. London, 1960. Spink & Son Ltd.

UNTIL now the only comprehensive list of English hammered coins has been that in Brooke's *English Coins*, published thirty years ago. Since then, new and fundamental studies of almost every period have greatly advanced our knowledge: and although a gallant attempt was made by the late C. A. Whitton to incorporate as much as possible of the new information into his 1950 edition of Brooke, the time

was already approaching when wider scope and a thorough replanning were needed. Mr. North has undertaken this formidable task, and we now have in our hands the second volume, covering the period from Edward I to Charles II, the first, to deal with the earlier coinage, being promised soon.

After ten pages of concise and instructive historical notes, the book consists entirely of lists and tables designed to enable coins to be identified quickly and accurately according to the most recent classification. Ten fine collotype plates at the end illustrate the main types of the coinage (though why no ryal of Edward IV?), and obviate the need for long verbal descriptions in the text. Where classification depends on the comparison of small points of difference in coins of similar appearance, such as the pennies of Edward I and II, and the varieties of portrait on the coins of the Tudors and Stuarts, convenient illustrations are given in the text. Details of lettering, punctuation, ornaments and mint-marks are made clear by enlarged drawings, which should prove very helpful.

Most of the lists are directly based on the standard monographs in the *Journal* or in the *Numismatic Chronicle*, many of them long-standing classics—the Fox brothers on Edwardian pennies, Lawrence on Edward III, Morrieson on the Tudors and Stuarts—but including most of the results, still not widely known, of more recent research.

Mr. North is happy to acknowledge the assistance given to him by those actively engaged in the study of particular periods. By this means, he has been able to incorporate up-to-date revisions of earlier published work and also to take into account the most important findings which have not always yet appeared in print. The sections on Elizabeth—basically written by Mr. Brown—and on Charles I are examples of how the author has been able to include the most recent published and unpublished work of experts currently engaged on research. Equally, he does not disguise the fact that neglected periods of coinage, e.g. Henry V and Mary, are given proportionately thinner treatment.

There are, however, one or two oddities of emphasis which cannot escape notice. The 'General' section of the Bibliography includes *The De Moneta of Nicholas Oresme*, a valuable document by any standards, but hardly to be bracketed (as one of only four books mentioned) with Brooke, Oman and Mr. Thompson's *Inventory* of hoards, to the exclusion of the only major work on English coinage of recent times, Sir John Craig's *The Mint*. It is sad to see that Carlyon-Britton's valuable work on the base coinages of Henry VIII and Edward VI has been ignored. One point of arrangement, which is not a quibble: Mr. North writes (page 8) that 'the reign of Edward I has been chosen for the break of the hammered coinage into two sections, on account of the great change which took place in the system of control of minting at this time'—why, then, divide the two volumes at 1272, instead of 1279, the date of the major coinage reform? At a time when it is becoming more widely recognized that medieval coinage has its own natural divisions quite unrelated to the political landmarks of history, such as a change of king or even of dynasty, it is a pity to make a division, arbitrary anyway, which involves the long-cross coinage being split between two volumes.

It would be useful, where the lists do not exactly follow the standard classification cited, for footnotes to indicate published sources of such revisions. For instance, the distinction between Classes II *a* and *b* of Edward I's pence is new: all that is needed is a footnote, '*B.N.J.* xxviii. 288' to indicate that the sub-class is a refinement of the Fox classification. Again, not everyone will know where to look for further information about Lambert Simnel's and Perkin Warbeck's pieces. This seems to be a point which should be borne in mind for Volume I. In the earlier period, the coinage of which is much more complex, the number of monographs

and notes which affect the classification is much greater, and although there are some standard reference works such as the British Museum Catalogues, there will be points of departure from them, in arrangement and in detail, on every page. It would therefore be of the utmost value to users of the work to be able to refer to the sources of new information.

The book will principally be used as a means of identifying and referring to coins. How useful it may prove in this respect will only be revealed in practice. A spot check does, however, suggest that Mr. North has not always understood his material; for instance, it is quite impossible to tell from the table on p. 66 whether a type V groat of Edward IV is of Vc or Vd. Lettering (particularly the P in *Posui*) is the principal criterion, but it is not even mentioned: the accidental features are faithfully recorded, but the essential has been overlooked.

Nevertheless, it would be wrong to give any suggestion that this was not a book to be used frequently by all students and collectors of the earlier English coinage. The fact that it will be so used, however, imposes on the author a great responsibility of selection, for what he includes will become established and what he omits may be forgotten. From the high standard achieved by Volume 2 we are encouraged to look forward eagerly to the appearance of Volume 1, which will be quite indispensable as an up-to-date list of early English, particularly of Anglo-Saxon, coins. The results of Mr. North's great and patient labour of collation are presented in a book of handsome format, with an admirably clear and expansive layout which makes reference easy: we must be grateful to author and publisher for a useful and much needed contribution to English numismatics.

IAN STEWART

PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 1960

PRESIDENTS OF THE SOCIETY

1903-8	P. W. P. CARLYON-BRITTON, D.L., F.S.A.
1909	W. J. ANDREW, F.S.A.
1910-14	P. W. P. CARLYON-BRITTON, D.L., F.S.A.
1915-19	LIEUT.-COL. H. W. MORRIESON, R.A., F.S.A.
1920-1	FREDERICK A. WALTERS, F.S.A.
1922	J. SANFORD SALTUS—till 22 June
1922	GRANT R. FRANCIS—from 28 June
1923-5	GRANT R. FRANCIS
1926-7	MAJOR W. J. FREER, V.D., D.L., F.S.A.
1928	MAJOR P. W. P. CARLYON-BRITTON, D.L., J.P., F.S.A.—till 20 February
1928	LIEUT.-COL. H. W. MORRIESON, F.S.A.—from 22 February
1929-32	LIEUT.-COL. H. W. MORRIESON, F.S.A.
1933-7	V. B. CROWTHER-BEYNON, M.B.E., M.A., F.S.A.
1938-45	H. W. TAFFS, M.B.E.
1946-50	CHRISTOPHER E. BLUNT, O.B.E., F.S.A.
1951-4	EDGAR J. WINSTANLEY
1955-8	HORACE H. KING, M.A.
1959-	DEREK F. ALLEN, B.A., F.S.A.

THE JOHN SANFORD SALTUS GOLD MEDAL

This medal is awarded by ballot of all the members triennially to 'the Member of the Society whose paper or papers appearing in the Society's publications shall receive the highest number of votes from the Members as being in their opinion the best in the interest of numismatic science'.

The medal was founded by the late John Sanford Saltus, Officier de la Légion d'Honneur, of New York, a vice-President of the Society, by the gift of £200 in the year 1910.

Medallists

1910	P. W. P. CARLYON-BRITTON, D.L., F.S.A.
1911	MISS HELEN FARQUHAR
1914	W. J. ANDREW, F.S.A.
1917	L. A. LAWRENCE, F.S.A.
1920	LIEUT.-COL. H. W. MORRIESON, F.S.A.
1923	H. ALEXANDER PARSONS
1926	GRANT R. FRANCIS, F.S.A.
1929	J. S. SHIRLEY-FOX, R.B.A.
1932	CHARLES WINTER
1935	RAYMOND CARLYON-BRITTON
1938	WILLIAM C. WELLS
1941	CUTHBERT A. WHITTON, B.A.

- 1944 Not awarded
- 1947 R. CYRIL LOCKETT, J.P., F.S.A.
- 1950 CHRISTOPHER E. BLUNT, O.B.E., F.S.A.
- 1953 DEREK F. ALLEN, B.A., F.S.A.
- 1956 F. ELMORE JONES
- 1959 R. H. M. DOLLEY, B.A., F.S.A.

(For Officers and Council for 1960 see Vol. XXIX, p. 430.)

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 26 January 1960, Mr. R. H. M. Dolley, Director, in the chair, Miss Veronica Butler read a paper entitled 'The Weight of the Later Saxon Penny'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 23 February, Mr. D. F. Allen, President, in the chair, the following were elected to Membership of the Society: Cdr. R. G. Gerhardt, S.C., U.S.N., Messrs. A. L. N. Jay, C. D. Thomson and W. J. Zimmerman. The evening was devoted to medals, tokens, and jettons.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 22 March, Mr. D. F. Allen, President, in the chair, the Borough Librarian and Curator, Kettering, was elected to Membership of the Society. Mr. S. E. Rigold read a paper entitled 'The Two Primary Series of Sceattas'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 26 April, Mr. D. F. Allen, President, in the chair, Miss Elizabeth Pirie was elected to Membership of the Society. The President then presented the John Sanford Saltus medal for 1959 to Mr. R. H. M. Dolley who made a short address of thanks to the President. The rest of the meeting was devoted to two short papers: by Mr. R. H. M. Dolley a review of some of the work done in recent years in identifying new mints of the Anglo-Saxon period and by Mr. F. M. Stubbs a discussion of the attribution of the mint-mark sun and rose dimidiated to the reign of Edward IV rather than Edward V.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 24 May, Mr. D. F. Allen, President, in the chair, Mr. J. D. Brand was elected to Membership of the Society. The Society then debated the motion 'This house recommends the adoption of a Decimal Coinage in Great Britain'. The background to the motion was put by Mr. H. W. A. Linecar who briefly outlined the development of decimal systems of coinage in various Commonwealth countries. The case against the motion was outlined by the Secretary. The motion was then thrown open for debate, which was wound up by Major C. W. Lister for the motion and by Dr. J. P. C. Kent against it. The motion was carried by 29 votes to 15 on a show of hands.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 28 June, Mr. D. F. Allen, President, in the chair, the President announced the death of Lt.-Col. C. L. Evans, an Honorary Member and the last surviving Founder Member of the Society. There were elected, to Ordinary Membership, Mr. H. S. Swann and to Junior Membership Mr. D. E. Quail. Dr. J. P. C. Kent then read a paper entitled 'Essays in Coinage by Machinery in the Reign of Charles I'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 27 September, Mr. D. F. Allen, President, in the chair, the Biblioteca Apostolica Vaticana was elected to Membership of the Society. Notice of the Anniversary Meeting was given by the President, who drew attention to the new rules regarding nominations for Officers and Council. Mr. R. H. M. Dolley then read a paper by himself and Mr. F. Elmore Jones entitled 'The Short-Cross Coinage in the Light of some recent Hoards'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 25 October, Mr. D. F. Allen, President, in the chair, Mr. M. B. Jones was elected to Membership of the Society. The President read out the Council's nominations for Officers and Council for 1961. Mr. B. H. I. H. Stewart then read a paper on 'The Scottish Coinage c. 1280-1357: a Review'.

At the Anniversary Meeting held at the Warburg Institute on Wednesday, 30 November, Mr. D. F. Allen, President, in the chair, Mr. H. H. King was elected to Honorary Membership and the following to Ordinary Membership: Miss M. P. Bellamy, Messrs. B. W. Forster, A. W. Jan and R. J. M. Selfe. The result of the ballot, announced by the President after his Address, was as follows:

President: D. F. Allen, B.A., F.S.A.

Vice-Presidents: A. E. Bagnall; C. E. Blunt, O.B.E., F.S.A.; E. Burstal, M.A., M.D.; G. V. Doubleday; H. H. King, M.A.; E. J. Winstanley, L.D.S.

Director: R. H. M. Dolley, B.A., F.S.A.

Secretary: P. Spufford, B.A.

Treasurer: P. H. Vernon, M.R.C.S., L.R.C.P.

Librarian: J. P. C. Kent, B.A., Ph.D.

Council: C. H. Allen; J. M. Ashby, M.A.; P. Grierson, M.A., F.S.A.; Sir Francis Hill, C.B.E., M.A., Litt.D., LL.M., F.S.A.; Major C. W. Lister, R.A.; C. S. S. Lyon, B.A., F.I.A.; C. W. Peck, F.P.S.; J. C. Pollard, M.A.; J. Porteous, B.A.; H. Schneider; B. H. I. H. Stewart, B.A., F.S.A. (Scot.); W. Slayter; J. Weibel.

Dr. Vernon presented his accounts for the year ended 31 October and they were formally adopted.

EXHIBITIONS

January

By Mr. D. G. Liddell:

A Henry IV heavy noble of the Calais mint. This important coin was recently brought to light after having been in the drawer of a desk for a considerable length of time. It was in the possession of a Mr. Thomas Pattinson of Carlisle who was the great grandfather of the late owner of the coin, and it seems safe to assume that it has been in the same family for at least the last hundred years.

The coin is of Blunt type 2(a) with the coronet on the rudder horizontally placed and the French arms of type 1. It is, however, from different obverse

and reverse dies to the coin listed by Mr. Blunt, and is therefore an unpublished variety. The discovery of this coin brings the number of known specimens of Calais heavy coinage nobles of Henry IV to five, all of which are from different dies. Three of the other four specimens are in the British Museum, the fourth being in the American Numismatic Society collection.

The weight of the coin is $119\frac{1}{2}$ grains, and it is perhaps especially interesting in view of the discovery last summer of another unpublished heavy noble of Henry IV, the London mint specimen from the Winchester Cathedral sale which was exhibited to the Society at the time.

By Mr. D. G. Liddell on behalf of Mr. K. V. Graham:

William I, type *B.M.C.* iii. Penny of Thetford by the moneyer CINRIC. Unrecorded type for this moneyer.

By Mr. D. G. Liddell on behalf of Mr. J. J. North:

1. Eadred. Penny, Brooke type 1. Moneyer HEREPIC. An unpublished moneyer.
2. Eadred. Penny, Brooke type 3. Uncrowned bust to right. Moneyer HILDULF. Cf. Chester (1950) hoard no. 258 for coin with similar bust.
3. Henry I. Penny, type IX. Reads —GEL ON—. Uncertain mint, perhaps Nigel of Thetford.
4. Henry VIII. Penny of Durham, 2nd coinage. Apparently struck in gold. This coin was examined by Dr. Kent who sees no reason to doubt its authenticity. A specific gravity test gave a very high figure and he has suggested that the coin was made from 'Angel' gold, i.e. $23\frac{1}{2}$ carat.

June

By Mr. J. M. Ashby:

Charles I sixpence, m.m. portcullis, type 3. Unpublished error, reverse legend reads CHRSTO.

November

By Mr. F. Elmore Jones:

Henry II. 'Cross-crosslets' penny of Thetford (Bust A1) with initials of surname of unpublished moneyer **WILLIEM:DE:** = ?Willem Fitz Derewald of numerous Pipe Roll entries.

Obv. [+HENRI RE]X ANGL *Rev.* +WILLIEM:DE(?):ON:T[ER

Die duplicate of *B.M.C.* 747 and 747a presumed to be of Willem Ma:.

ADDRESS BY DEREK F. ALLEN

PRESIDENT OF THE BRITISH NUMISMATIC SOCIETY

Delivered at the Anniversary Meeting, 30 November 1960

OUR Society has pursued its even course for another year. I would have preferred to say that it has had another successful year, but I think the word 'success' implies expansion and I am afraid that we cannot make that claim in 1960. Indeed our numbers have slightly fallen to 322 as against 341 at the beginning of the year, a loss of 19. There were 17 elections during the year, including 3 junior members, but this was counterbalanced by 6 deaths, 22 resignations and 8 amovals. In a Society on the scale of ours such a decline in numbers is a serious matter and I must appeal to members, especially those in professional contact with persons interested in coins and medals, to make an effort to restore the losses during 1961.

The reduction in our numbers can certainly be connected with the increase in our annual subscription from two to three guineas for ordinary members at the beginning of the year. This has resulted in an appreciable increase in revenue; subscriptions have brought in £135 a year more than in the preceding year. We have also received £180 in tax recovered, following the successful outcome of last year's negotiations with the Treasury. Our income today is still insufficient to support unaided the publication of the *British Numismatic Journal* on the same scale and to the standards which we so rightly value. We have had the benefit of a grant of £150 from the British Academy and I am very glad to say that another grant, this time of £100, has been promised us for 1961. We have also received two very generous anonymous donations towards the cost of the *Journal*. The Society owes a great debt to these supporters and well wishers, without whom it would not have been possible to maintain the quality of its publication. But I do not think the Society should overlook that its normal revenue from subscriptions and other regular sources of income is not sufficient to support its current activities. That we are breaking even is due to outside assistance on which, however welcome, we ought not as a Society to have to rely.

This is a Society with a tradition behind it and with vitality in its bones. I have no doubt it will weather any storms, financial or other. But I feel that I should put it before the Society quite bluntly that, although under the watchful eye of your Treasurer, Dr. Vernon, we have no immediate anxieties, the Society is nevertheless not paying its way.

There is only one significant economy we can make, namely to shorten the *Journal*, since there can be no question of lowering its standards. That we are most loth to do, but it may become necessary. The only real solution lies in increasing our membership and hence our support and revenue. I would like the Society to set itself a goal of 400 members and, as a start, to aim at securing 5 new members at every meeting—not less. I should then have no hesitation in claiming success.

Six of our members died during the year. Lt.-Col. C. L. Evans was an

Honorary Member and our last surviving founder member. Another Honorary Member, Mr. V. H. Rendall, had been a member since 1905. We are indeed sad to lose these links with our early years. Much better known to the present generation of members was Mr. Raymond Carlyon-Britton, a member since 1911, who, through his father, brings back memories of the Society's origins. He was a distinguished contributor from time to time to our *Journal*, mainly on medieval and Tudor subjects, particularly in connexion with Ireland. In 1935 he was awarded the John Sanford Saltus medal. Ill health kept him in recent years from attending the Society's meetings, but his death is a loss to the Society. Mr. W. D. Ferguson was prominent in the numismatic world of New Zealand and at a distance took a keen interest in the Society's work. We have also lost Mr. H. K. Hepburn-Wright and Miss I. Shrigley.

The deaths which I first recorded leave as our senior member your past President, Mr. H. H. King. He has been a member of the Society for 50 years; it is with particular satisfaction that we have been able, tonight, to do him the honour of electing him an Honorary Member, where he joins the distinguished company of Sir Frank Stenton, who was so elected last year. We wish him health and success to his numismatic work for many years to come. And we should not overlook the heavy burden he bears in connexion with the editing of the *Journal*.

To him and his co-editors, Mr. Blunt and Mr. Dolley, we owe the 1958 *Journal*, which actually appeared in the course of the year under review. Printing delays are horrific and growing worse. We cannot expect the 1959 *Journal* until some date early in 1961. We must earnestly hope that this interval between titular year and actual year of issue will not become an enduring feature of the Society. I must not be led into making a political speech, but I will allow myself the remark that I hope the printing trade will not be entirely impervious to the effects of the reputation it is acquiring.

Delay or no delays, the 1958 *Journal* has proved a particularly valuable number, with something for everyone from the pre-Roman era to the reign of Queen Victoria, and with items relating to Ireland, Belgium, France, and America as well as to Great Britain.

The Library of your Society has been completely rearranged in the course of the year by our active Librarian, Dr. Kent. This arrangement has taken the form of an amalgamation with the library of the Royal Numismatic Society. The two have always been largely complementary; in recent years, when the two libraries have been housed side by side in a single room, the unsatisfactory condition of the arrangement of our library has been underlined. We can be extremely grateful to Dr. Kent for having removed entirely this stigma, which had survived from the chaos of the war years. I am sure the Society has everything to gain from the amalgamation, which gives added reality to the enduring relations of goodwill which now exist between ourselves and the senior Numismatic Society. At the same time it gives members ready access to a wider range of literature. I wish more members made use of it and could enjoy the wise and friendly help which Dr. A. Barb of the Warburg Institute is always so ready to supply. He has our gratitude.

Mr. Dolley has again, as your Director, indefatigably arranged, and often

led, our meetings. As usual we have held 8 meetings in addition to the present one. We have had three evenings devoted to Saxon subjects, one to medieval, one to Stuart, and one to Scottish subjects. In addition we have had one debate and the traditional medal-and-token evening. The debate, on decimal coinage, which was lively and well attended (perhaps because it was followed by our annual party) was by way of an experiment. Opinions on its success are probably mixed according to whether members were on the winning or the losing side. My own impression is that a debate can from time to time add some welcome diversity to our usual proceedings, but that we do not want to have one too often. The medal-and-token evening does not today attract the interest which it used to do and I think it will be as well to give it a rest. Mr. Dolley has in hand a programme at least as varied for next year. It is one of the signs of vigour of the Society that, unlike some years ago, there is always a plentiful supply of worthwhile, and often important, papers to present to the Society.

As you will have learned from the Ballot Paper, Mr. Stewart Lyon is unable to continue as our Secretary owing to his business commitments. I am sure you will all join me in regretting Mr. Lyon's departure and equally in welcoming Mr. Spufford in his place. I would not like Mr. Lyon to retire from the Secretaryship without his hearing an expression of gratitude from the Society and from myself in particular for the exemplary way in which during the last two years he has carried out what can be a very heavy burden.

The major numismatic event of the year has probably been the publication of Mr. Peck's *Catalogue of the English Copper, Tin and Bronze Coins in the British Museum*. He has achieved a magnificent and monumental task, which will be of value to numismatists for all time. We are very glad that in recognition of this work he has been awarded the medal of the Royal Numismatic Society.

Our own triennial medal has, this year, been voted to Mr. R. H. M. Dolley for his great contribution to Anglo-Saxon numismatics, in the pages of our *Journal* and elsewhere. We hope that what we have had so far from Mr. Dolley is only the opening phase and that there is a great deal more still to come. The important volume of papers presented to Sir Frank Stenton, now in the press, of which he is the general editor, and to some extent the inspiration, promises to take Anglo-Saxon numismatics a major step forward. It is in a form which should greatly help the historian and the archaeologist to appreciate and make use of the new light cast on a once neglected period by the progress made in numismatic studies.

Owing to printing delays, to which I have already referred, we cannot point to another volume in the Sylloge series. I can, however, say that the catalogue of the Anglo-Saxon coins in the Hunter Collection is now almost out. This will be the second volume in the series and a very important one. I hope that as many members as possible will support this publication and, indeed, the series as a whole.

The year has also witnessed a remarkable revival of interest in Colonial and Commonwealth coins. We have had general studies from Mr. H. Linecar and Mr. L. V. Wright, while Mr. F. Pridmore has set foot on a major undertaking. I hope we shall hear more on these subjects at meetings of the Society.

Another book published in the course of the year, to which I would like to draw attention, is Dr. Sutherland's luxurious study of Gold, an interesting, unusual and colourful book by one of the most thought-provoking of contemporary numismatists.

Those who were privileged to attend this year's annual Numismatic Congress at Nottingham in the delightful surroundings of the University will long recall Dr. Sutherland's interpretations of the place of the medal in the twentieth century, as well as Mr. Dolley's exercise in historical detection and Mr. Mattingly's Roman reminiscences. The institution of the annual Numismatic Congress is now one of the main events of the numismatic year. I think it is right that numismatists should not confine their meetings to London, and, as I mentioned last year, I am inclined to think that our own Society ought from time to time to be ready to meet elsewhere.

In September 1961 there is to be an International Numismatic Congress in Rome. I hope your Society will be well represented there. The theme is one which will appeal to many members, the interaction of Mediterranean thought and history with the cultures of other areas, as reflected in numismatics.

It is an encouraging sign that the study of British numismatics is losing much of its insularity. I understand that this summer there were at one time no less than four serious British students at work on the collections in Stockholm. Contacts have been established with Poland, to name only one country across the Iron Curtain. I myself maintain a regular correspondence with Czechoslovakia. As world travel becomes easier and cheaper—as it undoubtedly will in the next decade—I hope we shall find that the work of this Society is more and more closely integrated with that of our continental colleagues. In method I am sure that there are some countries in Europe which still have much to learn from us, while other countries have not suffered in the same degree as ourselves from the inhibiting effects of insularity. I would welcome more contributions to the work of this Society from continental members and I have wondered whether as a Society we would not do well to organize the exploration of museums on the Continent. This is at present somewhat haphazard; I am sure that there would be found to be hoard evidence of the greatest importance, which is simply not yet known and which can only be discovered if those who have the requisite knowledge go and see for themselves.

I have confined myself, so far, to business, which, by and large, is, I think, the proper subject matter for a Presidential Address. It may, however, be legitimate for me to spread my wings a little. What I am going to say now is prompted by a broadcast which I heard not very long ago on the radio, in which the poet Robert Graves was discussing his writings and his life. He made one remark which I think will be of interest to this Society. When he wrote of any particular period, so he said, he always kept on his desk a set of the coins of the period. He knew of no better way in which to evoke in himself the mood of the times in which his characters were set than to handle their money. At one time it would be Roman sestertii, at another seventeenth- or eighteenth-century crown pieces, or perhaps the ducats of medieval Venice.

This Society rightly dedicates itself to the detailed study of coins and medals.

We are not, anyhow most of us, poets and novelists and to us coins are not merely evocative background material. Nevertheless I wonder whether, in the pursuit of knowledge and truth, we may not sometimes go too far in eschewing the human side of the objects we handle.

After all coins have been the stuff of day-to-day business; the acquisition of them (or a purist might say of the value they represent) has been the end to which vast resources of human effort have gone. The labour, guile, or parsimony spent in the accumulation of even the meanest coin hoard is something we can easily overlook when at meetings of this Society we dissect the contents. Moreover the coins themselves represent, for many of the periods or places with which we deal, probably the only readily obtainable physical remains to bring reality to the dry bones of history (and sometimes drier pages of historians). Few Anglo-Saxon scholars can hope actually to have in their hands at home a charter or even a clearly dated and identified potsherd.

I can carry this philosophy into my own chosen sphere, the Celtic coinages of the Ancient World. An Ordnance Survey map is in preparation to illustrate the remains in Britain of the Celtic phase. It is a remarkable fact that well over half the spots on this map consist of finds of coins. After pottery, they are the commonest surviving relic of what I think we can once again call a great age, and the only one any ordinary person today can readily own. When handling such coins, with their fantastic designs and perverse imagery, I try sometimes consciously to make the effort of visualizing the coin as it must have been and seemed to its original owners. I find the effort intriguing but exacting. How many coin users read the half-romanized inscriptions, often half off the coin? Could Cunobelin himself decypher his own name or were all those bold legends simply for show? for *decus et tutamen*? Such questions can sometimes be answered, but more often they cannot. It seems to me, however, that if, because there is no real evidence on which to answer them, we refrain from asking them, we deprive ourselves of much of the intrinsic interest of our material.

While I would never for a moment suggest that the Society should be deflected from its proper purpose of studying coins in an orderly and numismatic way, I do suggest that from time to time it will do no harm to see ourselves and our subject as others see us and it, and to let our imaginations wander—provided always that we recognize such wanderings for what they are. When we have pursued our studies to the limit of our powers of research and deduction, let us not think that our subject is exhausted. I believe that in Robert Graves's philosophy we will still find a clue to help us in the perceptive treatment and observation of our material.

THE BRITISH NUMISMATIC SOCIETY

BALANCE SHEET AS AT 31 OCTOBER 1959

1958			£ s. d.			1958			£ s. d.			£ s. d.			£ s. d.	
£					£	s.	d.	£						£	s.	d.
16	Subscriptions received in advance				6	16	0									
28	Subscriptions compounded				23	5	0									
1,026	Sundry Creditors and Outstanding Charges				1,130	1	9	1,260	Investments at cost					833	5	1
	J. Sanford Saltus Medal Fund								£833. 5s. 1d. 3½% Defence Bonds					426	13	3
	Capital Account	166	14	11					\$500 2½% Savings Bonds							
153	Less Debit Balance on Income Account	13	9	0				96	Sundry Debtor—Income Tax Refund for 1955 (supplementary) 1956/7, 1957/8, 1958/9 and part 1959/60							1,259 18 4
	Publications and Research Fund					153	5 11		J. Sanford Saltus Medal Fund							
	Balance as at 31 October 1958	156	16	3				167	£166. 14s. 11d. Defence Bonds						166	14 11
157	Add Anonymous Donation	5	0	0				152	Library at cost						151	12 5
						161	16 3	10	Furniture at cost						10	7 6
800	Provision for estimated cost of 1959 Journal					1,000	0 0		Cash at Bankers and in Hand							
	General Purposes Fund							56	Bank Current Account				449	18	1	
	Balance as at 31 October 1958	311	7	0				222	Bank Deposit Account				—	—	—	
311	Deduct Excess of Expenditure over Income for the year	128	16	10				528	Post Office Savings Bank				341	9	3	
						182	10 2	—	Petty Cash				1	5		
															791	8 9
£2,491						£2,657	15 7	£2,491							£2,657	15 7

REPORT OF THE AUDITORS TO THE MEMBERS OF THE BRITISH NUMISMATIC SOCIETY

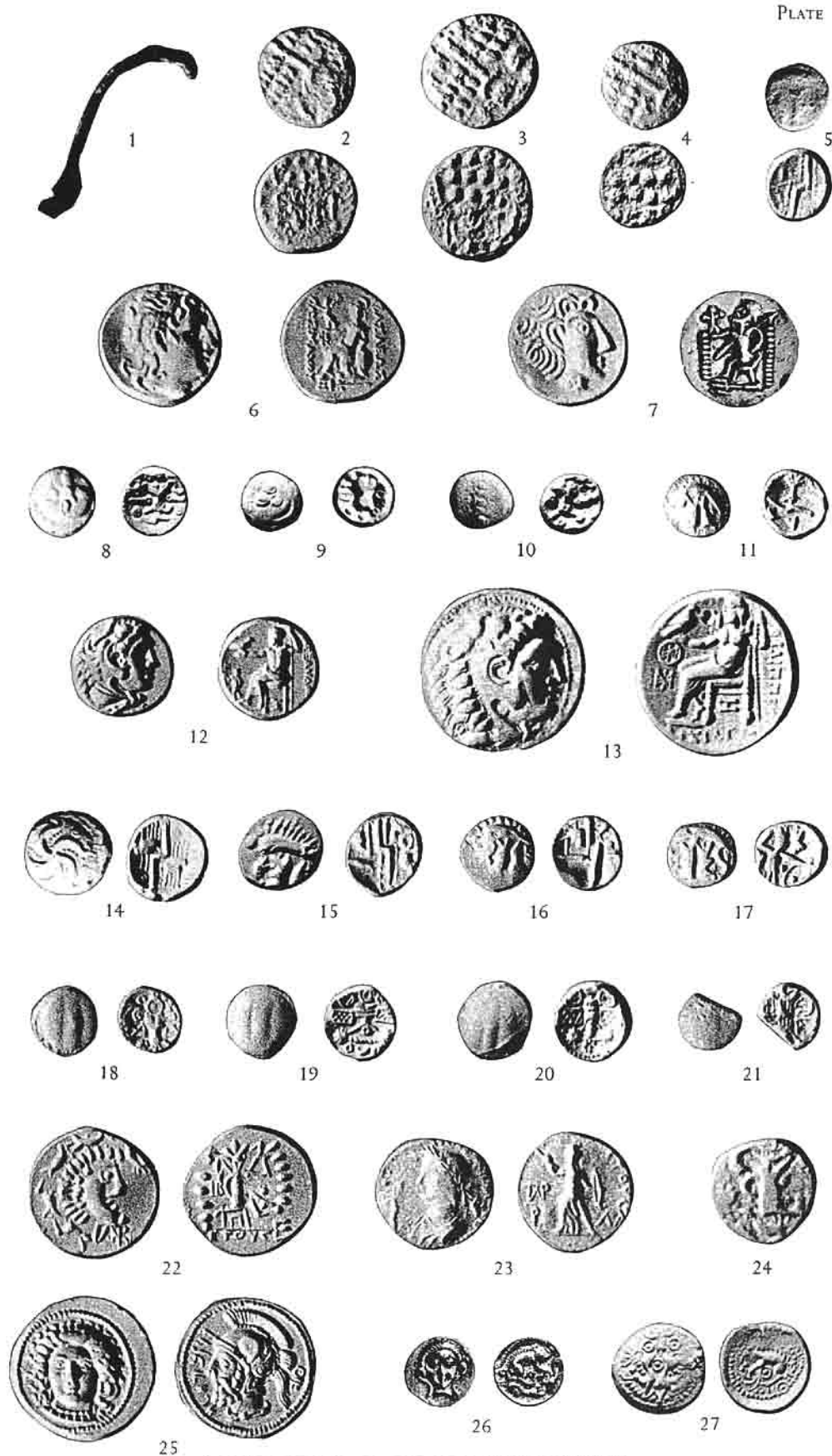
We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit. In our opinion proper books of account have been kept by the Society so far as appears from our examination of those books. We have examined the above Balance Sheet and annexed Expenditure and Income Account which are in agreement with the books of account and no credit has been taken for subscriptions in arrear. In our opinion and to the best of our information and according to the explanations given to us, the Balance Sheet gives a true and fair view of the state of the Society's affairs as at 31st October 1959 and the Expenditure and Income Account gives a true and fair view of the excess of expenditure for the year ended on that date.

51 Coleman Street,
London, E.C. 2
7 October 1960

GILBERTS, HALLETT, & EGLINGTON,
Chartered Accountants

EXPENDITURE AND INCOME ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 1959

[illegible]



A DUROTRIGIC HOARD AND COMPARATIVE MATERIAL.



PIA, 1 —, 2 PIB, 1 —, 4 PIIA, 2 —, 4 PIIB, 1 —, 2
Finglesham Dover



PIII, 1 —, 3 —, 4 —, 6 —, 7a VA, 3 VB, 1 —, 3
London Sarre Sarre Colchester



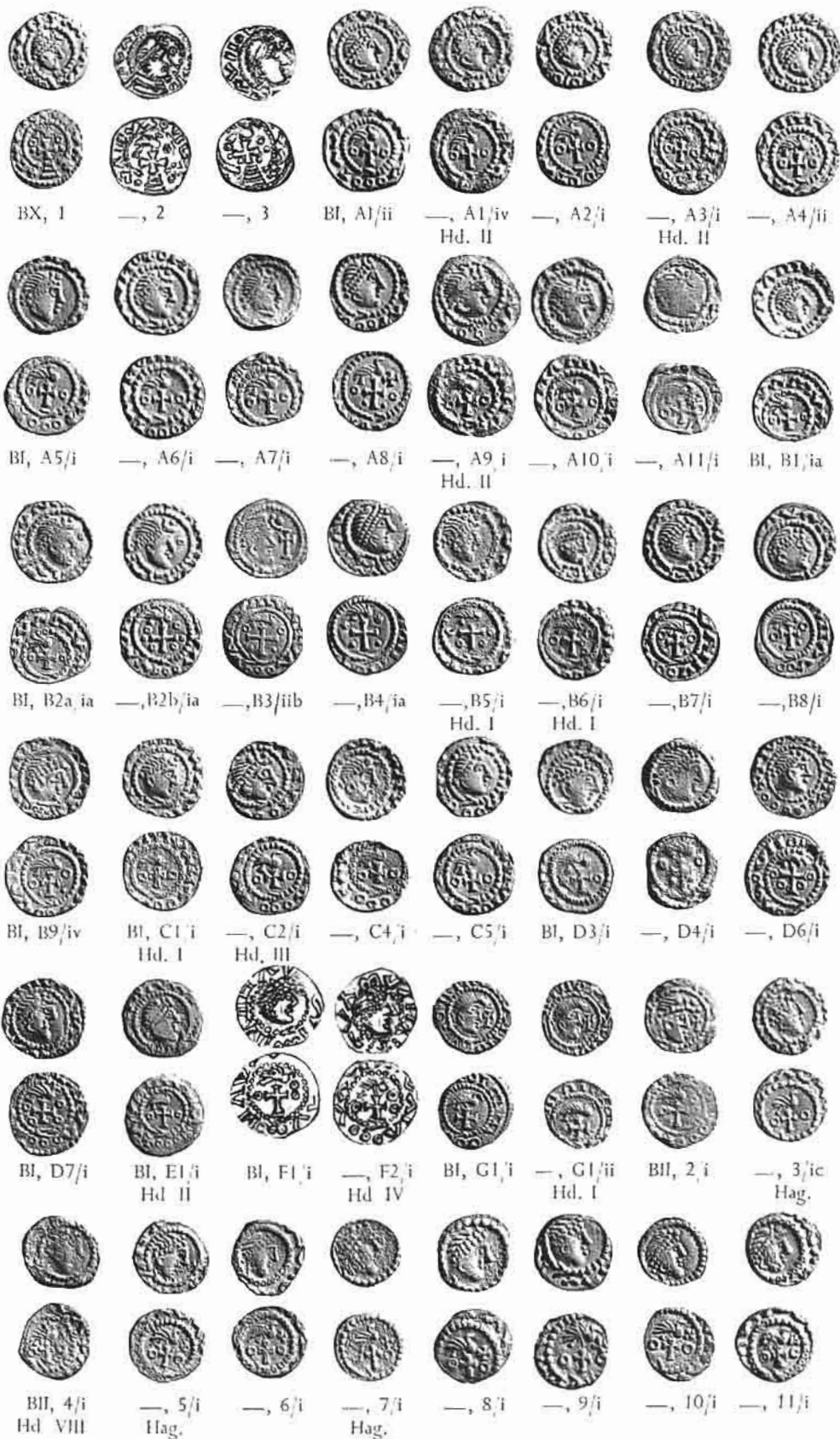
A1, 1 A2, 1b —, 3b —, 4g —, 5 —, 8b —, 18 —, 21
Hd. II Hd. I Hd. I



A3, 6 —, 7 —, 8 —, 9 —, 10 —, 11 —, 15 A4, 1
Hd. I Hd. II Hd. II Hd. II Hd. II Hd. II Compton



R1a R1a R1a R1a inv. R1a inv. R1b R1b R1b (late)
AM Hd. VI, 4 Hd. VI, 5 BMC, 43 Hd. VI, 6 Hd. VI, 7 Hd. VI, 8 AM





BIII, A1/i —, A2/i —, A3/i —, A5/i BIII, B1/i —, B3/i —, B5/i —, B6/i
Hd. VIII Hd. VIII



BIII, B9/i BIII, C2/i BM, B, 259 BMC, T.37 —T.37 —T.37 Hill, T.72
Hd. VIII Hd. VIII Caister (RPM)



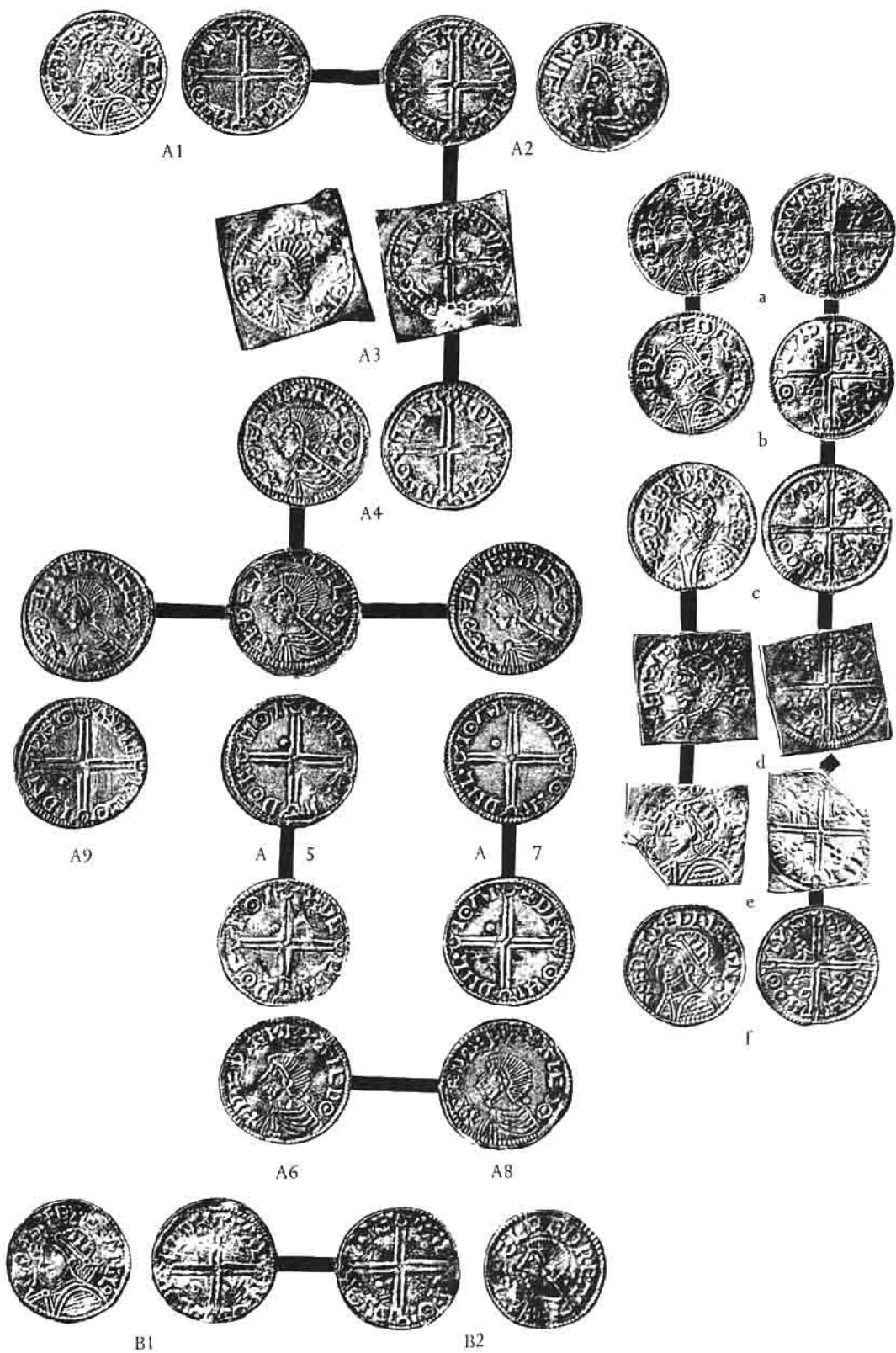
R1x R1y R1y R1y R3 R3 R3 R1z
BMC 39 Hag. Hag. Hag. Caister Kingston Hag. or marginal



R2 (early) R2 R2 R2 R2 R2 R2 R2z
AM Caister Caister Ipswich Thetford Hag. (RPM) Hd. VIII



BMC, T.3a —, T.3a —, T.3a BMC, T.32a —, T.32a
Waking Hd. VIII Hd. VIII Hd. VIII Stourmouth





1



2

AETHELRAED II



3

4

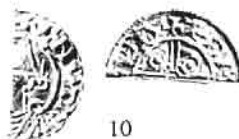
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CNUT



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16



17

HARTHACNUT (Joint reign)



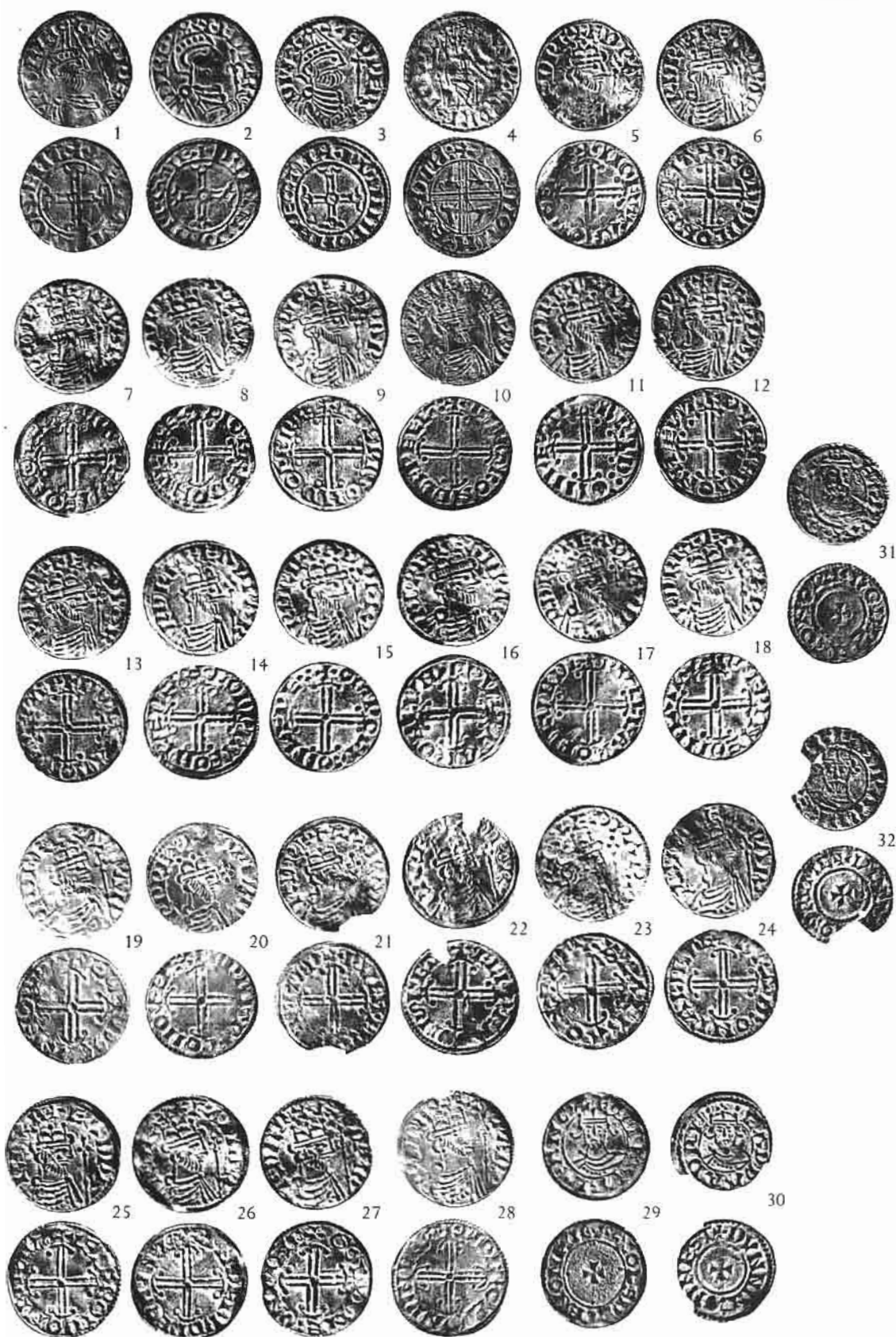
18



19

HARTHACNUT (Sole reign)

THE MINT OF AXBRIDGE



PARCEL FROM THE SEDLESCOMBE HOARD



1

2

3

4



5

6

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8



9

10

11

12





1



2



3



4



5



6



7



8



9



10

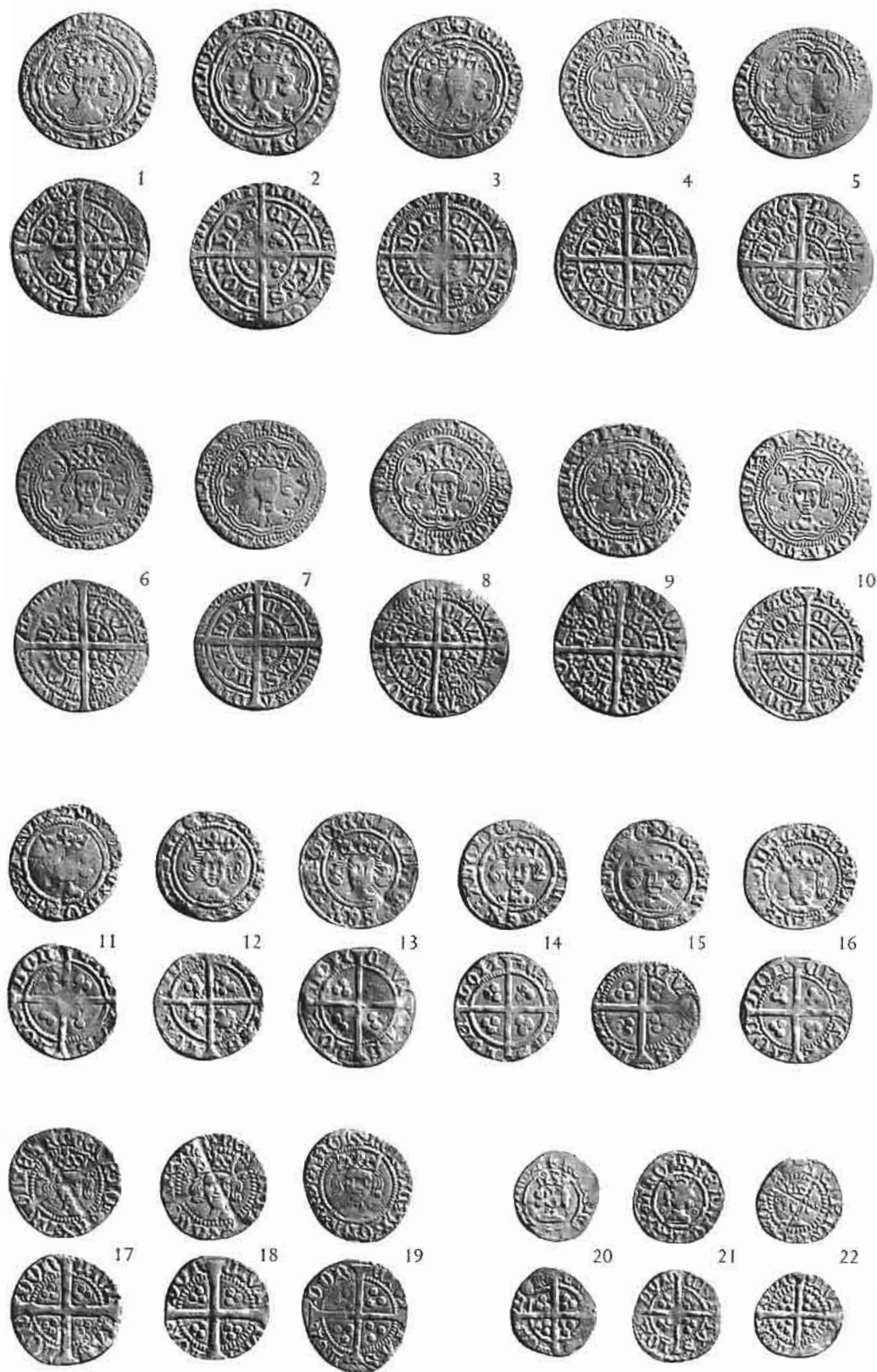


11



12





HALF GROATS AND SMALL SILVER OF HENRY IV and V



1



2



3

TRURO AND EXETER HALF-CROWNS, etc.



5



6



7



8

SOME HOARD EVIDENCE FROM A NINETEENTH-CENTURY COLLECTION

By PETER SPUFFORD

ON 31 March 1891 in a train near Oxford, the Rev. Samuel Savage Lewis, Fellow and Librarian of Corpus Christi College, Cambridge, died unexpectedly at the age of fifty-five. He left a widow, Agnes Smith Lewis, who wrote his biography in 1892, but no children, so he bequeathed his collections of coins, gems, seals, vases, and archaeological books to his college. These collections remain in the college to this day, but, despite their richness, have been comparatively little used by succeeding generations of scholars. The gems and rings were catalogued by Professor J. H. Middleton in 1892 and some of the more spectacular Greek vases are well known, but the coins have remained almost untouched until recently—apart from very occasional references, as, for example, by G. C. Brooke when preparing the British Museum *Catalogue of the Coins of the Norman Kings*. The college has, however, now commissioned a number of scholars to catalogue the collection of coins. The Rev. H. St. J. Hart, of Queens' College, is working on the Greek coins, by far the most important part of the collection, which are planned to appear as a fascicule of the *Sylloge Nummorum Graecorum*, Mr. Michael Lewis, of Corpus Christi College, is working on the Roman coins, and I have catalogued the medieval pieces.¹

S. S. Lewis was an indefatigable traveller and his frequent journeys ranged from Ireland to the Levant. In his travels he never missed an opportunity of acquiring the antiquities which he so much loved and which made of his rooms in Corpus a veritable museum, which was legendary in his lifetime, even if somewhat neglected after his death. He was able to collect most widely whilst a bachelor don, in the years between his election to a Fellowship at Corpus in 1869 and his marriage in 1887. The medieval coins were bought at the auctions of Sotheby and Wilkinson or Rollin and Feuardent, as well as from dealers such as Lincoln or Hoffman, and from private individuals. Among his medieval coins there are a number of English pieces, and these include several finds of single coins from the Cambridge area, as well as portions of three, or possibly four, hoards. There are 2 stycas from the vast Hexham hoard, 10 ninth-century pennies from the Croydon hoard, 3 Edwardian sterlings from the Kilfenora hoard, and 2 pennies of Æthelred II which may be part of a hoard from near Bury St. Edmunds.

HEXHAM, c. 845

J. D. A. Thompson, *Inventory of British Coin Hoards* (Royal Numismatic Society, 1956), records as hoard 188 the discovery of some 8,000 stycas at Hexham in 1833. Among the Lewis collection there are two pieces from this hoard, which Lewis bought in Newcastle on 11 June 1877.

¹ I should like to express my thanks to the Council of Corpus Christi College for permission to publish these pieces here, and to Dr. Richard Vaughan, Librarian of the College, and Mr. Graham Pollard, of the Fitzwilliam Museum Coin Room, for their co-operation.

(i) Styca of Eanred, King of Northumbria 810-41; moneyer Hwaetred; weight 1.236 gm. = 19.0 gr.

Obv. +EANRED REX

Rev. +HVAETRED

(ii) Styca of Æthelred II, King of Northumbria, first reign 841-4; moneyer Brother; weight 1.192 gm. = 18.3 gr.

Obv. EÐFLRED RE+

Rev. +BROÐER

These would appear to be very ordinary and very typical of the styca coinage according to C. S. S. Lyon, 'A Reappraisal of the Sceatta and Styca Coinage of Northumbria', *B.N.J.* xxviii (1955-7), 227-42.

CROYDON, c. 875

C. E. Blunt and R. H. M. Dolley in 'The Hoard Evidence for the Coins of Alfred', *B.N.J.* xxix (1958-9) have devoted a section to the Croydon hoard, pages 222-34, which has supplemented and supplanted the information given in J. D. A. Thompson's *Inventory* where this hoard is listed as 111. The hoard, found in 1862, contained about 250 coins, of which Messrs. Blunt and Dolley were able to list 185, together with a number of fragments of hack-silver. Lewis on 2 July 1872 bought eight pieces from this hoard at Tunbridge Wells, which are numbered 22, 60, 63, 105, 152, 155, 159, and 169 in Messrs. Blunt and Dolley's list, and in addition there are in the collection the fragments of a penny of Burgred and another of Alfred which have no tickets indicating provenance, but probably came from this hoard.

BURGRED, KING OF MERCIA 852-74

22. *B.M.C.* type a; unbroken lunettes; moneyer Diga; weight 0.875 gm. = 13.6 gr.

Obv. BVRGRED REX

Rev. :M°N:

+DICT̃::

:ET̃:

→
Plate XXIII, 1.

60. *B.M.C.* type c; lunettes broken at sides; moneyer Diarulf; weight 1.222 gm. = 18.8 gr.

Obv. +BVRGRED REX

Rev. FMON

DĨ•RYL

ET̃••

↓
Plate XXIII, 2.

63. *B.M.C.* type c; moneyer Ethelulf; weight 1.212 gm. = 18.7 gr.

Obv. +BVRGRED RE+

Rev. FMON

+EÐELVF

ET̃

↑
Plate XXIII, 3.

Fragment. *B.M.C.* type a; weight 0.475 gm. = 7.3 gr.

Obv.

Rev. ••MOH

••⊕••S

→
Plate XXIII, 4.

(ST.) EADMUND, KING OF EAST ANGLIA 855-70

105. Type as *B.M.C.* vol. i, p. 91, no. 51; moneyer Beornheah; weight 1.297 gm. = 20.0 gr.

Obv. +EADMVND REX

Rev. +BEORHHAETH

←

Plate XXIII, 5.

ÆLFRED, KING OF WESSEX 871-901

152. *B.M.C.* type i; moneyer Dudinc; weight 1.030 gm. = 15.9 gr.

Obv. +ÆELBRED / RE+

Rev. .MON.

+DVDIN

.ETΛ:.

↑

Plate XXIII, 6.

155. *B.M.C.* type i; moneyer Ealhere; weight 1.037 gm. = 16.0 gr.; broken.

Obv. +ÆELB(RE)D / REX

Rev. .EMON.

+EΛLh·E()

.ETΛ:.

↓

Plate XXIII, 7.

159. *B.M.C.* type i; moneyer Ethered (known as a Canterbury moneyer); weight 1.317 gm. = 20.3 gr.

Obv. +ÆELBRED / RE+

Rev. .MON.

EDERED

ETΛ

→

Plate XXIII, 8.

169. *B.M.C.* type i; moneyer Luhinc; weight 0.885 gm. = 13.7 gr.; broken.

Obv. +ÆELBRED / (R)E+

Rev. MON

LVhIN

·:ETΛ:.

←

Plate XXIII, 9.

Fragments. *B.M.C.* type i; weight 0.363 gm. = 5.5 gr.

Obv. (+A)ELBR(E)D: / (REX)

Rev. (M)ON

()L

(E)TΛ

↓

Plate XXIII, 10.

BURY, c. 991-7

In the collection there are two pennies of Æthelred II, which Lewis bought from Keeble¹ on 10 December 1873, and which he labelled as found near Bury St. Edmunds. These may be the whole of a minor find of strays, or part of a larger hoard which does not appear in Thompson's *Inventory*. Both coins are Crux-type pennies and can therefore be dated to the period Michaelmas 991 to Michaelmas 997. If there was a hoard, the publication of any further Crux-type pennies found near Bury before 1873 might render it possible to reconstruct it.

¹ 'Keeble' was probably G. J. Keeble of Christie and Keeble, silversmiths and pawnbrokers, of 1 Abbeygate Street, Bury St. Edmunds.

ÆTHELRED II, 979-1016

(i) *B.M.C.* type *iiia*; moneyer Wulfgar of London; weight 1.596 gm. = 24.6 gr.; *cf.* Hildebrand type C, no. 2961.

PVLFÆAR MTO LVND

←

Plate XXIII, 11.

(ii) *B.M.C.* type *iiia*; moneyer Byrnsige of Winchester; weight 1.638 gm. = 25.3 gr.; *cf.* Hildebrand type C, no. 4145.

+BYRHSIGE MTO PINT

↑

Plate XXIII, 12.

KILFENORA, *post* 1344

In his *Inventory* J. D. A. Thompson records as hoard 206, a find of some 500 English silver pennies in the summer of 1872 at Kilfenora, County Clare. Thompson used as his evidence a letter from Robert Day of Cork to Sir John Evans, dated 22 October 1872, from which he deduced that the hoard consisted of pennies of the Canterbury, London, and York mints of Edward I, deposited *c.* 1280-1307, of which 80-100 were in 1872 in the possession of Mr. Thomas Ware of Cork.

In the Lewis collection there are three pennies from this hoard, one of Canterbury, one of London, and one of York, together with a covering letter from Dr. Nicholas Caulfield from whom Lewis obtained the pieces.

Royal Institution

Cork April 18 1873.

My dear Mr. Lewis,

I hope this will be the first to greet you on your arrival. The three silver pennies that I promised you on Wednesday Ev. They with about 500 similar ones were found last autumn under one of the upright stones of a Druidical Circle in the vicinity of the sum Cathedral of Kilfenora, Co. Clare, my friend Mr. Thomas Ware of Cork, Solicitor, was on his summer trip and took in the romantic part of the Co. Clare. during his sojourn the discovery was made, he had a bag full of them and gave me my choice of any I may wish to take, and as many. So I selected a few of each of mints of London, York and Cantâr which were the only ones represented and you now have a specimen of each, and I trust they may prove acceptable, So with kindest wishes that they may see you safe and sound having escaped the perils of the deep

Believe me

most sincerely yours

Nich Caulfield

The penny of the Canterbury mint was of Edward I, a mule of Fox's classes III and IV, in rather poor condition, weighing 15.3 grains. The penny of the London mint was also of Edward I, of Fox's class *Xb*, in rather better condition weighing 21.4 grains. The penny of the York mint was, however, of Edward III, of the so-called Florin type, issued between 1344 and 1351. The weight, 17.7 grains, does not give any indication of the point during these years at which it may have been struck. This last coin does, however, enable one to bring the hoard forward from the reign of Edward I and redate its deposit to '*post* 1344', although nothing more exact can be said until further coins from this hoard can be located.

SOME 'NORTHERN' VARIANTS, ETC. OF THE 'CRUX' ISSUE OF ÆTHELRÆD II

By R. H. M. DOLLEY AND V. J. BUTLER

ON Plate IV of vol. xxviii (1955) of this *Journal* there appears as no. 26 an apparently Intermediate Small Cross/Crux mule by the York moneyer Oscet(e)l. The coin was included because the obverse die was of patently English work, but it must be confessed that even at that time neither of the authors was particularly happy about the reverse. In 1955, however, much less was known about the imitation of English coins in Ireland and in Scandinavia, and the authors were then reluctant to exclude from the English series any pieces that could be considered doubtful. Now the position is very different, a commentary, we would suggest, on the importance of the work being done by the Anglo-Irish team in Stockholm under the auspices of the Swedish Humanistic Fund, and the time is perhaps ripe for a reassessment of this and other 'mules' in the light of new understanding of both the English and the Scandinavian coinages.

The first point to bear in mind is that Intermediate Small Cross/Crux mules struck in England undoubtedly do exist. Predominantly they are from mints in southern England, but in the National Museum of Antiquities at Edinburgh we have noted a superb example from the Inch Kenneth hoard (*Inventory* 196 but cf. *B.N.J.* xxviii, i (1955), pp. 50 and 51 and documented run of coins in N.M.A.) by the Stamford moneyer Swertgar which establishes that the odd die could and did reach northern England. A second point to be borne in mind is that there are a large number of York coins from the period c. 995–c. 1000 to which the English numismatist has been known to apply the expressive if not very elegant term 'funnies'. Broadly these fall into three main classes where the 'Oscetel' group of coins is concerned:

- (a) Coarse versions of the Crux type proper (Hild. 809 and 809 var.)
- (b) Apparent Crux/Intermediate Small Cross mules—something never found in southern England (Hild. 609, 628, 805, 806, 807, 808)
- (c) Mules where one die seems English and the other Scandinavian (Hild. 610 var., 773, 774, 804, 813, and 813 var.)

Already in 1954 preliminary work on the Igelösa hoard from Skåne had established that a large number of these coins had Lund as their presumptive mint of origin, and accordingly it seemed desirable to approach the problem from an entirely new angle. This has been supplied by their consideration in the light of the Danish Yholm hoard deposited a few years earlier, a find singularly uncontaminated by the class of Scandinavian imitation with which we are here concerned. It contains two coins which in our opinion are undoubtedly of English origin and struck at the York mint from dies of official work. They appear on the accompanying Plate (Pl. XVIII) as nos. 610¹ and 804 var.—we have found it a great convenience to retain the Hildebrand numeration—and are respectively a quite new variety of the Intermediate Small Cross type and an Intermediate Small Cross/Crux mule. The moneyers are in the one case Arncytel and in the other Oscetl, and in both instances the

¹ For convenience the Stockholm die-duplicate Hild. 610 is the actual specimen illustrated.

mint is indubitably York. What is new about the Intermediate Small Cross coin is its inclusion of a sceptre, but in all other respects it is a normal obverse of the class even down to the minutiae of its epigraphy.

Accepting these two coins as English, and we feel that we have no option but to do so inasmuch as the workmanship is impeccable and one hoard-provenance at once Danish and very early, we must now consider their relationship to the 'Oscetel' group as a whole. The pattern of die-linking that emerges is astonishing, and is far too complicated to be set out in words. The first steps, however, may briefly be indicated as follows. The obverse of the Arncytel coin also occurs as a mule with a barbarous Crux reverse with meaningless legend, while the reverse is muled with an irregular Crux obverse which is heavily die-linked into a whole group of barbarous Oscetel reverses of both Crux and Small Cross type. Likewise the obverse of the Oscetel coin is found with a particularly barbarous Crux reverse purporting to be of the same moneyer, while the reverse is found with two barbarous Crux obverses which lead off into precisely the group of Oscetel Crux and Small Cross reverses as the Arncytel coin already mentioned. On the Plate (Pl. XVIII) there in fact appear five obverse and twelve reverse dies used in no fewer than nineteen combinations. It is our submission that two obverse and three reverse dies only are English, and that of the combinations likewise no more than two represent English dies used on English soil.

It is noteworthy that Arncytel is known at York from only two coins of faultless English style, a solitary Crux coin (Hild. 611) and the Intermediate Small Cross coin already mentioned. The presumption is, therefore, that he began striking very late in the Crux issue, and soon desisted. With Oscet(e)l the position is more complicated. An Ascytel or Aschetel—the same name—is known at York in First Small Cross and First Hand, and also from a single die of English work in Crux (Hild. 632) which most significantly does not mule into the Oscetel chain already described. Also to be taken into account is a barbarous Crux/Small Cross mule which does mule into the chain and which reads Ascelt (Hild. 628). All the Crux and Small Cross Oscetel coins which are recorded by Hildebrand are heavily die-linked, and so must all be considered Scandinavian, as must his two quite barbarous Long Cross coins, but there remains the unique coin (Hild. 804 var.) in Copenhagen which is from the Yholm hoard and which just cannot be faulted on grounds of style. For what it is worth, our interpretation of the evidence is that a moneyer Ascytel or Ascytel was working at York until c. 980, i.e. long enough to have struck a number of First Hand coins. Some fifteen years later, at the very end of the Crux issue, a namesake was issued with a pair of Crux reverse dies, one reading Ascytel and one Oscetl (clearly the Scandinavian name was giving the London die-engraver trouble), an Intermediate Small Cross obverse die and a Crux obverse die. Almost immediately he decamped, and it is interesting to list the dies which he took with him:

OBVERSES

Intermediate Small Cross

1. Hild. 804, &c.
2. Hild. 610, &c.

REVERSES

(a) Intermediate Small Cross

3. Hild. 610, &c. (Arncytel)

(b) Crux

4. Hild. 774, &c. (Oban)

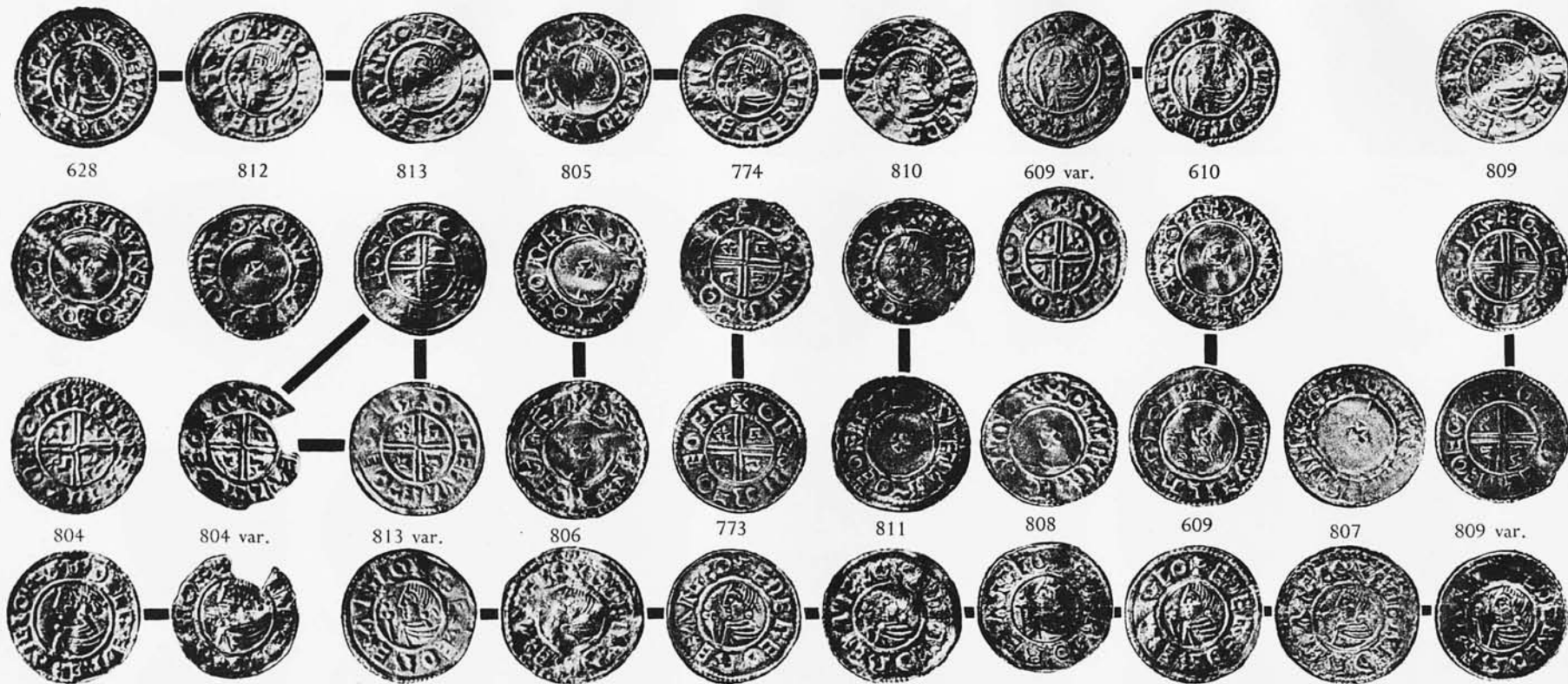
5. Hild. 813, &c. (Oscet(e)l)

It will be noticed at once, and is we feel a tribute to late Saxon mint-practice, that Oscetel did not abscond with any of the current (i.e. Crux) obverse dies, and that to muster as many as three reverse dies he had to help himself to those of his colleagues. What exactly happened we do not know, but it is perhaps significant that Arncytel, to judge from his name a pure-blooded Scandinavian (a Dane?), did not strike in the next type, while Oban, by the same token a Hiberno-Norseman, seems to have satisfied the authorities that he was not an accomplice since he strikes at York throughout the rest of Æthelræd's reign. Arrived in Scandinavia, Oscetel set up in business at Lund—the Igelösa hoard contains more than forty coins from one pair of dies—but his subsequent career concerns the Scandinavian and not the English numismatist. Suffice it here to say that he eked out his English dies with Scandinavian copies, and that the resulting 'mules' have provided the students of both series with some of their most intractable problems. Absolute finality cannot be claimed, but we do feel that the above note has indicated the lines along which progress has still to be made. At the same time we would draw attention once more to our proposition of an entirely new variant of the Intermediate Small Cross type, and it is here illustrated from the Stockholm specimen by a greatly enlarged photograph:



Acceptance of the coin as English, incidentally, means that we now have nine mints for the type, and the inclusion of York in the canon must suggest that the distribution of the dies was less regional than was originally postulated. Once again, too, we must conclude a paper with an expression of our deep indebtedness to our colleagues who have supplied us so generously with direct

photographs. The plate that accompanies this note is composed entirely of these indispensable aids to comprehension. One of the specimens illustrated is in Copenhagen (610 and 804 var.), and for photographs of this we are indebted to Overinspektør Otto Mørkholm. One of the coins is in Mr. C. S. S. Lyon's collection (813 var.), and we are under a heavy obligation to him for photographing not only this but also the remaining seventeen coins which are in the Stockholm Cabinet and made available through the good offices of første antikvarie fil. dr. N. L. Rasmusson. To Mr. Lyon, too, and to Miss G. van der Meer and to antikvarie L. O. Lagerqvist we are grateful for much assistance in the scrutiny of the material, a task where the student stands particularly in need of objective corroboration of each individual link in the chain of die-identities on the validity of which a paper of this kind is utterly dependent.



SOME 'NORTHERN' VARIANTS ETC. OF THE *CRUX* ISSUE OF AETHELRAED II



SOME MISREAD MONEYERS OF LONDON IN THE REIGN OF ÆTHELRÆD II

By V. J. BUTLER

THE mint of London under Æthelræd II accounted for perhaps almost a quarter of the total English coinage. Hildebrand picked out and recorded for what is now the Systematic Collection in Stockholm over a thousand coins from the mint, no two of which he considered identical. In all, between the years 978 and 1016, according to Hildebrand, 106 moneyers were active at London, and there is evidence for as many as 61 moneyers engaged in the minting of Æthelræd's last type alone; figures, incidentally, which contrast strangely with the decree attributed to Æthelræd that moneyers should number 'in every principal town three, and in every other, one'.

It is not surprising therefore, if we consider the vastness of the material at Hildebrand's disposal when he came to catalogue the London coins of this reign, that the occasional misreading can be found. Here and there a duplicate has slipped in, where a coin, chipped, worn, or 'pecked' has seemed to bear a variant of the legend of its true duplicate. In the work now in progress to produce a definitive publication both of the Swedish hoard-coins and of the Systematic Collection, the modern method has been to compare coin with coin for die-identity much more closely than was the practice in medieval numismatics in Hildebrand's day. Two other factors have helped in the work of correction. One is a realization that die-cutting could not have been entrusted to careless illiterates. The majority of Æthelræd's coins bear regular legends in which both the mints' and moneyers' names correspond to their manuscript counterparts, or present few deviations in spelling that are not philologically explicable. Thus a coin comes in for special scrutiny if it bears a strange spelling, or exhibits a moneyer's name that seems not to conform to the elements and usage of Anglo-Saxon name-giving. The other factor is a suspicion, which has proved well justified, of 'one-coin' moneyers. It is, of course, quite possible that the only evidence for the activity of a certain moneyer in a mint may be one single coin—such is the accident of survival—but, nevertheless, such a coin merits close attention to make sure that it is as unique as it seems.

In this way, two names given by Hildebrand as moneyers of London can now be shown to owe their existence only to misreading, and a number of variant forms of authenticated moneyers' names can likewise be eliminated.

On page 111 of the 1881 edition of *Anglosachsiska Mynt* the name EODERD appears. Only one coin bears this name, and it might be thought that the name is a die-cutter's error for EODERE, who strikes a number of coins in the same type, Crux, and in others. Or else, explaining the legend as it stands, one might see it as a form of a name *Godheard (cf. Eadweard > Edwerd on coins of the Confessor). Apart from certain phonological difficulties in the way of this explanation,¹ it is not easy to find evidence for the name Godheard in Old

¹ See O. von Feilitzen, *The Pre-Conquest Personal Names of Domesday Book*, Uppsala, 1937, pp. 57–58.

English sources, though the two elements from which it is made up are in themselves well attested. In Searle's *Onomasticon Anglosaxonicum* only three examples of the name are cited, two of which refer undoubtedly to persons of continental Germanic origin, whilst the third is by no means certainly Old



FIG. 1.

English.¹ Reaney derived the modern surname Goddard from Old French or Old German.² But as it happens, there is no need to search so far for an explanation of the name on this coin. The reverse of Hild. 2542 (Fig. 1a), on which EODERD is said to appear, is from the same die as Hild. 2469 (Fig. 1b) which clearly reads EDPERD. In the light of the letter-forms used on the coinage of this reign, it is easy to see how such a misreading arose.

There are, on the surface, no such difficulties attending the acceptability of the name Eadgar, recorded as the moneyer of Hild. 2319 (Fig. 2a). Yet here again we have a mythical moneyer; this single coin is the only evidence we have for the name at London, and it proves to be a reverse die-duplicate of Hild. 2440 (Fig. 2b). It should be read as EALDĠAR, a moneyer known at London from at least three different reverses.

Two London coins hitherto classified under other names must be reattributed to the moneyer Edwi. The irregular form EDRI of Hild. 2458 (Fig. 3) which corresponds to no known Anglo-Saxon name-formation, is seen on closer scrutiny to read EDPI. I have not been able, as in the instances above, to find an undefaced reverse-duplicate of this coin, but the additional line on the P which caused Hildebrand to read it as R is without any doubt one of the trial-pecks so often found on coins from Scandinavian hoards. Hild. 2499 (Fig. 4a) was read in error as +EDPINE O LVNDENE. The letter O standing alone would be a highly unusual form of a copulative; in fact the

¹ Searle, *Onomasticon Anglosaxonicum*, p. 261.

² *Dictionary of English Surnames*, p. 137.



a *b*

FIG. 2.



FIG. 3.



a *b*

FIG. 4.

224 SOME MISREAD MONEYERS OF LONDON TEMP. ÆTHELRÆD II
 legend reads +EDFI M:O LVNDENE and is from the same die as Hild.
 2474 (Fig. 4b).

Another irregular form which can be eliminated by a comparison of dies is that of Hild. 2451 (Fig. 5a), recorded as EAPINNE. In searching for a less worn coin from the same reverse die, for the purpose of such a comparison, I found that in the Systematic Collection there are three, but that the legend of the four coins has been rendered by Hildebrand in three different ways. Hild. 2396 (Fig. 5b) is recorded as bearing the normal regular form EADFINE,



FIG. 5.

whilst Hild. 2408 (Fig. 5c) and 2409 (Fig. 5d) are supposed to omit a letter and appear as EADPNE (cf. Hild. 2640-4 GODPNE and 2774-5 LEOFPNE). Whilst it is quite certain that all four coins are from the same die, because of the distinctive spacing and formation of the letters, the true reading is somewhat difficult to determine. The *wyn* symbol and the letter next to it are cramped together, and although the regular form EADFINE was perhaps intended, the space between I and N is provided with a diagonal line, as well as the two verticals of the N. Thus the reverse legend of these four coins should be read as EADPNE.

The rest of the corrections I have been able to make to the Hildebrand listing of London coins consist mainly of small details, mostly turning on the difficulty of determining whether a letter is an E or Æ. On coins of this reign the A of the digraph is usually represented by the merest stroke on the E, i.e. *Æ*. With the spreading serifs of the E, the presence of surface pecks, and the effects of wear, it requires the most careful comparison of other features of the die to ascertain when two coins are duplicates. The decision of reading E or Æ is further complicated on coins of the London style of Æthelræd's Last Small Cross type by the appearance of Æ where E would normally be expected. This usage must be completely indiscriminate. On some coins of

this style and type every E is turned into Æ by the addition of a stroke. The first coin of the London mint in Hildebrand's catalogue, no. 2019, for example, has the moneyer's name written ÆADMVND, and even more significant, the obverse legend reads + ÆÐ ÆLR ÆDR ÆXANꝚ, where probably for the second Æ and certainly for the fourth there can be no phonological explanation.¹



FIG. 6.

Another detail that requires close attention is the die-cutter's practice when short of space at the end of a legend of using the arm of the incipient cross as the second vertical of an N. This is the explanation of several legends which seem to end in LVNDEI; if the diagonal should be worn away, the letter runs the risk of being read as I or even of being missed altogether in mistake for a stop or a colon. A good example illustrating both the above points is afforded by Hild. 2455 (Fig. 6a) recorded as + ÆDELRIC MƿON LVNDE but in fact from the same die as Hild. 2154 (Fig. 6b) read correctly as + ÆDELRIC MƿON LVNDEN.

The proper place for the recording of all such minutiae must be the publication of the whole Stockholm collection, but I have appended here a list of further instances where duplicates, and coins from the same reverse die, have been transcribed by Hildebrand as different examples.

Obverse and Reverse Die-duplicates

Hild. 2026 ÆLEFİN, 2111 ÆLFFİN. Both coins appear to read ÆLEFİN.

„ 2113, 2504. The obverse is c 4 ir 55, the reverse +ELFFINE (not +ÆLFFINE) MO LV'N'.

„ 2181, 2508. a 3 ir. 55. The true reading is +ÆDELRIINE MƿO LV.

„ 2234, 2308. Both read DRHFOLD. This in turn may be a die-cutter's error for BRHFOLD (cf. 2246-51) or perhaps represents the name Drihtwold.

¹ This phenomenon occurs even more frequently than Hildebrand's transcriptions suggest.

Hild. 2358, 2386. The two irregular numbers amount to the same reading, viz.

EÐELRÆDRDEX ANCL. The reverse reads EADRERD in both cases.

„ 2818, 2838. a 5 reads +LVOFFINE M ON LVNDEN.

Reverse Die-duplicates

Hild. 2019, 2322.

„ 2155, 2183.

It only remains for me to thank Dr. Nils Ludvig Rasmusson and the authorities of the Royal Coin Cabinet at Stockholm for the excellent direct photographs from which have been made the blocks illustrating this paper.

AN APPARENTLY UNRECORDED CLASS OF HIBERNO-NORSE IMITATION OF THE COINAGE OF ÆTHELRÆD II

By R. H. M. DOLLEY

DEMONSTRABLY contemporary Irish imitations of English pennies of Æthelræd II are known which have for their models coins of his last four substantive issues, Crux, Long Cross, Helmet, and Last Small Cross (Hild. C, D, E, and A: Brooke 3, 5, 4, and 1, &c.). Independently of their types these Hiberno-Norse imitations can be divided into four basic classes:

- (a) Pennies with the name of Sihtric and the Dublin mint-signature.
- (b) Pennies combining the name of Sihtric and an 'English' mint-signature.
- (c) Pennies with the name of 'Æthelræd II' but the Dublin mint-signature.
- (d) Pennies with the name of 'Æthelræd II' and still preserving an 'English' mint-signature.

Coins of classes (a) and (c) are relatively common, of classes (b) and (d) comparatively rare, though in the case of (d) the paucity is to some extent exaggerated by the circumstance that even today many of the coins are not recognized as Irish.

Thanks to the Scandinavian—but not the Irish—coin-hoards the commonest of the contemporary imitations are those of Long Cross, and pennies of all four of the classes distinguished above will be found recorded in the pages of Hildebrand. Much less common are the Hiberno-Norse pennies which imitate Crux and Last Small Cross, the former predominantly from the Clondalkin hoard from the outskirts of Dublin and the latter deriving in the main from Scandinavian hoards. With rather more difficulty it is again possible to muster examples of all four of our classes, though in doing so it will be necessary to go beyond the trays of the Systematic Collection at Stockholm. Notably rare, on the other hand, are the contemporary Irish imitations of Æthelræd's Helmet issue, and in the 1881 edition of *Anglosachsiska Mynt* there are listed no more than one specimen of our class (a) and four of our class (c). The purpose of this note, however, is to suggest that there lurk in the pages of *Anglosachsiska Mynt* no fewer than six specimens of our class (d), a very blundered coin which Hildebrand gave rather improbably to Lymne, a very close copy of a penny of Lydford, and, finally, four coins, all from the same obverse die, which purport to have been struck at York.

To take first the coin of 'Lymne' (Hild. Ethelred 1608), the degree of blundering in the reverse legend is sufficient to establish a non-English origin, and the piece was in fact excluded from the English canon by Miss van der Meer in the course of her recent survey of *Anglosachsiska Mynt*.¹ Incidentally, I myself am not satisfied that the engraver was even essaying the Lymne mint-signature, and for the present, at least, I am reluctant to add Lymne to

¹ G. van der Meer, 'Some Corrections to and Comments on B. E. Hildebrand's Catalogue of the Anglo-Saxon Coins in the Swedish Royal Coin Cabinet', *Anglo-Saxon Coins* (ed. R. H. M. Dolley), London, 1961, pp. 169-87. On p. 174 the coin in question is condemned as 'not English'.

the list of English mints which have provided prototypes for the Hiberno-Norse series. There is, however, a world of difference between condemning a coin as 'not English' and giving it with confidence to another series, but it is hoped that the following text-block (Fig. 1) will be found convincing. The



FIG. 1.

coin at the left is the 'Lymne' coin, and to the right are two coins of our class (c) with the Dublin mint-signature.¹ It will be seen that the style of all three pieces is identical, and I would further draw attention to details of the epigraphy, for example the use of \eth for D, the bar in each case taking the form of a wedge. There is, too, an obvious connexion between the first element of the reverse legend and that of the commonest of Sihtric's Long Cross pennies,



FIG. 2.

those of the moneyer 'Færemin'. Indeed, it could be argued that Hild. 1608 belongs not to our class (d) but to class (c), but here it need only be said that it is unquestionably Irish.

The second of the coins under discussion, the penny of 'Lydford' (Hild. Ethelred 3040), is of an altogether different order. As must appear from the illustration (Fig. 2) the reverse is not at all blundered, and there are undoubted

¹ Hild. Ethelred 376 and 383—once again English and Irish students of the series are indebted to the authorities of the Royal Coin Cabinet at Stockholm for the enlarged direct photographs which illustrate this note.

pennies struck at Lydford for Æthelræd II which are of this type, are by the same moneyer, and employ the same form of copulative and the same mint-signature (e.g. Hild. 3039 and 3041). Nevertheless, a scrutiny of the obverse legend alone is sufficient to give the coin to the Hiberno-Norse series. In the first place, although this was not noted by Hildebrand, the final letter of the king's name is rendered not as D but as Ð in the Irish manner. In the second place the X of REX is rendered by a repetition of the initial cross—a well-attested Irish trait though in this type it is necessary to distinguish the elaborately serified form of the letter found on the Hiberno-Norse coins from a plainer form composed essentially of four wedges which is found on a number of coins which appear to be struck from dies engraved at Winchester.¹ Finally, and perhaps decisive in itself, there is the replacement of the GL element of the ethnic by M, a blundering as prevalent at Dublin as it is without precedent in the English series.



FIG. 3.

The remaining four coins (Hild. 671, 672, 674, and 676) all purport to have been struck at York, and on the form of the mint-signature of the first two—EO—and of the third—EOF—cannot well be faulted. The mint-signature of the fourth—EOF1—does, however, give some ground for suspicion, even though it cannot be pretended that it is in itself decisive. On all four coins, and not as Hildebrand suggests only on the first, third, and fourth, there is behind the king's head a small cross pattée, a feature which is very Irish, though it is found on a few coins of Lincoln which seem indubitably English. All four coins are in fact from the same obverse die, and here it is perhaps necessary only to illustrate Hild. 674 (Fig. 3). Incidentally, it is not without significance that none of the four reverse dies is found in combination with other obverses, and it should perhaps be added that the obverse die illustrated is particularly conspicuous when placed beside the run of the coins of York of this type, the great mint of northern England in the main using locally cut dies of a very distinctive type.² Characteristically Irish features of this obverse die include the use of Ð for D and of ✠ for X, while the treatment of the peak

¹ It is hoped to publish in Stockholm in the course of the next year or so a short monograph subjecting the Helmet type of Æthelræd II to the same stylistic analysis as that employed in recent studies of the Last Small Cross issue of Æthelræd II and of the Pointed Helmet issue of Cnut.

² Characteristic of the majority of these York dies is the omission of the peak from the king's helmet and the rendering of the details of the crown by engraved lines instead of cuneiform punches. For some reason a few of these dies found their way into southern England, and I have notes of their use at Bath and at Oxford as well as at Lincoln.

of the king's helmet can be very closely paralleled on the Dublin pieces already cited.

This note, then, has drawn attention to a class of Hiberno-Norse penny, the variety of Helmet issue preserving both the name of the English king and an English mint-signature, that finds no place in Roth's comprehensive if ill-digested survey of the Hiberno-Norse coinage published almost exactly half a century ago. To the best of my knowledge, too, this variety has not been distinguished by later students of the series, and it is not unsatisfactory that this note should suggest that Helmet was struck at Dublin on a slightly less exiguous scale than has been supposed. Even so, the Hiberno-Norse penny of Helmet type remains a rarity, and we may suppose that it was the comparatively low weight of the prototype which proved so inimical to its imitation among the Ostmen.

SOME FURTHER CRITICAL DIE-LINKS IN THE HIBERNO-NORSE SERIES

By R. H. M. DOLLEY

IN 1850 there came to light on the Baltic island of Gotland, at a place called Sibbenarve in the parish of Västerhejde, a hoard of nearly eight hundred coins (SHM Inv. 1597: SG 612). The great majority were German, and the date of deposit must fall a little after 1060, but there were also included coins from England, Denmark, Hungary, Ireland, Bohemia, the Eastern Caliphate, and Sweden. Unfortunately the hoard seems to have been somewhat neglected,



FIG. 1.

and there is some reason to think that the mass of the English coins were sold in 1885 to the London coin-dealer Lincoln.¹ By a happy chance, however, three of the Irish coins have remained in the Royal Coin Cabinet at Stockholm, and they are published here by kind permission of Dr. N. L. Rasmusson. Not one is recorded in the 1881 edition of *Anglosachsiska Mynt*, and the third is of quite exceptional interest for every student of the Hiberno-Norse series.

All three of the Irish coins were struck at Dublin some fifty or sixty years before the presumptive date of the hoard's concealment. Probably the latest is a very creditable imitation of a Last Small Cross penny of Æthelræd II of England (Fig. 1a). The reverse legend reads +CCOLBRANDIIODY, and the initial dittography does not appear to be due to double-striking. The weight

¹ A telegram from Lincoln to 'Riksantiquarien [Hans] Hildebrand' dated 16 Dec. 1885 is preserved in the Stockholm coin-room in the same box as the remainder of the coins from the hoard. It clearly envisages a purchase of some kind by Lincoln, though admittedly there is no reference to a specific hoard.

is 0.94 grammes (14.5 grains) which is on the light side for a coin of this issue but not so light as to cast doubt on the piece's authenticity. The die-axis is 90°, and the obverse legend begins at 11 o'clock. The portrait is of slightly unusual work, and the coin would have provided a most useful variant of Hild. Sihtric 13 even if the mint-signature had not read so clearly DX. This



FIG. 2.

spelling can only be for DYFELIN, whereas the other dies recorded for Colbrand had the equivocal spellings DM and DNM where one was always tempted to try to see some other significance.¹

Probably struck a few years earlier is our second coin (Fig. 1b), a passable imitation of a Long Cross penny of Æthelræd II by the London moneyer Ælfwine. No comparable piece is recorded in *Anglosachsiska Mynt*, but a die-duplicate is listed and illustrated as No. 21 in Roth's *Hiberno-Danish Coins*.² The weight is 1.41 grammes (21.7 grains), and the die-axis 90°. That the coin was struck not more than a year or two after the millennium is suggested very strongly by the occurrence of a cut halfpenny which may be presumed to be from the same dies in the great find from List.³ From this it would seem clear that Dublin almost immediately adopted a standard for the imitations appreciably lighter than that of the prototypes, another fundamental distinction between the Crux ('Clondalkin') and Long Cross coinages of the Ostmen.

Most important of all the Irish coins from Sibbenarve, though, is the coin of the same issue which has a reverse copied from that of a penny of the Derby moneyer Godwine (Fig. 2). As will be seen from the block, the obverse legend runs +S·IH·T·RICCVNVIEDYH. The weight is—significantly—on the high side, 1.76 grammes (27.2 grains), and the die-axis 345°. The interest of the coin is that it provides an obverse die-link between 'Derby' and 'Winchester', cf. the die-link between 'Lincoln' and 'Winchester' recently published in the *Numismatic Circular*,⁴ the obverse die being that employed

¹ DM cf. Hild. 13 and coins from same obv. but different rev. die at Leningrad and in British Museum (ex Lockett 485, ex Roth): DNM cf. Stora Sojdeby 2270 (Bror Schnittger, *Silverskatten från Stora Sojdeby*, Stockholm, 1915, p. 74—reprint with new pagination from *Fornvännen*, 1915).

² Bernard Roth, *Hiberno-Danish Coins*, London, 1910 (reprint with new pagination from *B.N.J.* vi). The coin is now in the British Museum (ex Lockett 495).

³ List 680 (K. Kersten and P. La Baume, *Vorgeschichte der Nordfriesischen Inseln*, Neumünster, 1958, p. 474).

⁴ R. H. M. Dolley, 'Significant New Die-links in the Hiberno-Norse Coinage of Dublin', *Spink's Numismatic Circular*, January, 1962, p. 6.

to strike Hild. Sihtric 99. Moreover, this is the first time in the Hiberno-Norse series that the critical CVNVNC title has been associated with a reverse legend purporting to belong to an English mint other than Winchester (cf. Roth, *op. cit.*, pp. 16-19).

As Fig. 3*a*, there is illustrated Hild. Sihtric 99, but here the chain of die-

*a**b**c**d*

FIG. 3.

linking is only beginning. The reverse die of the 'Derby' coin is found with at least two other obverses, Hild. Ethelred 348 (Fig. 3*b*) and Hild. Sihtric 1 (Fig. 3*c*). In other words there is now an unshakeable *nexus* not only between coins on which Sihtric uses the titles CVNVNC and REX, but also between coins of both those classes and coins which imitate the name of Æthelræd II. Unfortunately I have not yet been able to find either of the obverse dies employed with a Dublin reverse—though in the case of Hild. Sihtric 33 (Fig. 3*d*) the correspondence is so close that the possibility of recutting cannot be excluded. Indeed, one might well have claimed the die-link were it not for the apparent discrepancies between the first of the Rs in the legend, discrepancies that cannot quite be resolved by the supposition of double-striking.

For the sake of completeness there are here illustrated the two remaining dies so far recorded on which Sihtric is styled CVNVNC. The first coin (Fig. 4*a*) is Hild. 100 with a 'Winchester' mint-signature. A die-duplicate in the Lockett collection has been acquired by the British Museum.¹ So far I have been unable to trace the reverse die in the Hiberno-Norse series, though I suspect that Hild. Ethelred 4245 which exhibits much the same workmanship will one day be proved to emanate from the same stable. The second coin was published by Schnittger in his account of the great Gotland hoard from Stora Sojdeby,² but has had to wait until now for illustration (Fig. 4*b*). This is despite the fact that it is the only coin which formally links the coins with the CVNVNC title with the Hiberno-Norse mint at Dublin, the retrograde legend on

¹ Lockett 495.

² *Op. et pag. cit.*, 2278.

the reverse assigning the coin to the most prolific of all the Dublin moneyers, the celebrated Faraman or 'Færemin'.¹ Again I have not yet found the reverse die used with another obverse, but my suspicion is that such a coin will one day be found. The weight of the Stora Sojdeby coin is 1.54 grammes (23.7 grains), and the die-axis 270°. To date I have noted eight of the CVNVNC coins at Stockholm, and the weights are as follows:

1.76, 1.73, 1.60, 1.54 (2), 1.52, 1.49 1.30 grammes
27.2, 26.7, 24.7, 23.8 (2), 23.5, 23.0, 20.1 grains.

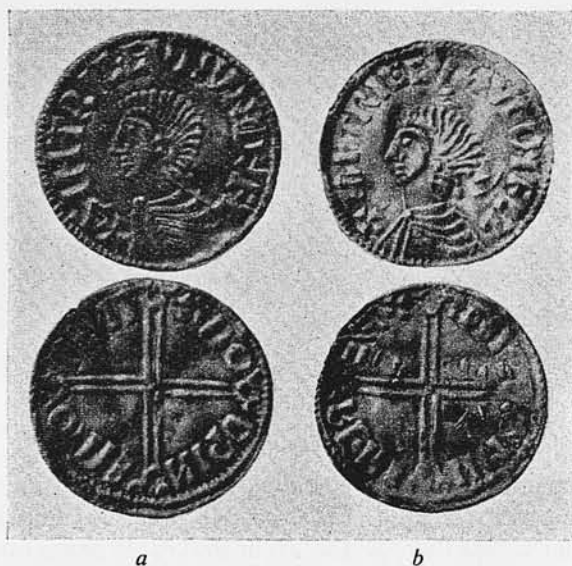


FIG. 4.

These figures must surely vindicate the suggestion made on p. 280 of Volume XXIX of this *Journal* that 'coins reading SIHTRIC and CUNUNC are generally "heavy"', and I think that it is becoming clear from the style of the coins as well as from the metrology that they belong at the head of the Long Cross imitations. In this connexion, too, it cannot be without significance that the die-linked REX and 'Æthelræd' coins are both 'light' and 'heavy', Hild. Ethelred 348 weighing 1.59 grammes (24.5 grains) and four specimens of Hild. Sihtric 1, 1.32 grammes (20.3 grains), 1.29 grammes (19.9 grains), 1.24 grammes (19.2 grains), and 1.22 grammes (18.9 grains).

¹ There is a more subtle but none the less valid connexion between the Stora Sojdeby coin and the 'Derby' piece from Sibbenarve. In the British Museum there is a coarse Hiberno-Norse penny which has the +GIODPINE M'C DEOR legend RETROGRADE.

SOME SCANDINAVIAN COINS IN THE NAMES OF ÆTHELRÆD, CNUT, AND HARTHACNUT ATTRIBUTED BY HILDEBRAND TO ENGLISH MINTS

By C. S. S. LYON, G. VAN DER MEER, AND R. H. M. DOLLEY

Introduction

THE problem of identifying those coins in the names of Æthelræd II, Cnut, Harold I, and Harthacnut purporting to be English in origin, which were in fact struck in Scandinavia, is one which has beset students of the Anglo-Saxon and Scandinavian series alike for several generations. Even the great nineteenth-century Swedish scholar Bror Emil Hildebrand was deceived into including many such coins in his famous catalogue of the Anglo-Saxon coins in the Royal Coin Cabinet in Stockholm,¹ as it is the object of this study to show, and it is indeed only recently, with the development of our insight into the monetary system of the Anglo-Saxon state, that it has become possible for the Scandinavian coins to be separated from the English with any certainty.

In this context, the most important single development has been the recognition that Eadgar's recoinage of c. 973 not only led to every coin bearing the name of the mint of issue and of the moneyer responsible for its issue, but was followed, for the remainder of the Anglo-Saxon period and beyond, by similar recoinages at regular intervals involving uniform changes in coin-type throughout the country. There is strong evidence in favour of these changes having taken place sexennially during the reigns of Æthelræd and Cnut, and triennially thereafter.² Almost as far-reaching in its consequences has been the realization that variations in die-cutting style within a particular issue during these two reigns have close regional associations, which has made it possible for coins unusual in style for the supposed mint of origin to be detected and their credentials examined. The decentralization of die-cutting which can be inferred from this phenomenon was first noted in connexion with Æthelræd's last issue, although it is equally apparent in Cnut's Quatrefoil issue, no detailed analysis of which has yet been published.³ With the introduction of the Pointed Helmet type, the variations in style become much less apparent, and it may be assumed that the factors which impelled the extensive delegation of die-cutting control had by then virtually ceased to exist.⁴

Long before recent research on the Swedish hoards led to these discoveries, the order of the main coin-types of Æthelræd and Cnut was propounded with considerable accuracy by Nordman in his scholarly treatise on the Finnish

¹ B. E. Hildebrand, *Anglosachsiska Mynt*, Stockholm, 1881.

² This theory first propounded in *N.N.U.M.* 1954, pp. 152-6 finds its fullest exposition in *Anglo-Saxon Coins*, ed. R. H. M. Dolley, London, 1961, pp. 152-8—cf. also *B.N.J.* xxviii, ii (1956), pp. 283-7.

³ R. H. M. Dolley, *Some Reflections on Hildebrand Type A of Æthelræd II*, *Antikvariskt Arkiv* 9, Stockholm, 1958.

⁴ *Commentationes de nummis saeculorum ix-xi in Suecia repertis*, Stockholm, 1961, pp. 189-222.

hoards.¹ Nordman improved on Hildebrand's original classification, but was unable to distinguish the Intermediate Small Cross variety of Æthelræd² or to place the Agnus Dei issue in its rightful place as an unsuccessful attempt at a replacement of the Helmet type:³ nor did he appreciate the posthumous nature of the Jewel Cross and Arm-and-Sceptre issues in the name of Cnut, although he did suspect the few Pacx coins of being so.⁴ Nordman agreed with Hauberg⁵ in assigning a number of Hildebrand's minor varieties of Cnut to Scandinavia, but retained Hildebrand Types A and B (similar to Æthelræd's Last Small Cross and Long Cross types respectively) within the English series, together with the mules between these types and with the Quatrefoil type, placing them at the beginning of Cnut's reign. It is one of the aims of this paper to show that, almost without exception, all such coins must have been struck in Scandinavia.

Æthelræd's last three substantive types were Long Cross (Hildebrand Type D), Helmet (Hildebrand Type E), and Last Small Cross (the bulk of Hildebrand Type A) in that order. Between the last two of these, as has already been mentioned, came the unsuccessful Agnus Dei issue (Hildebrand Type G). Cnut's three substantive types were Quatrefoil (Hildebrand Type E), Pointed Helmet (Hildebrand Type G), and Short Cross (Hildebrand Type H). None of these six substantive types accounts for fewer than 500 of the coins listed in Hildebrand's catalogue, and more than 1,000 coins of each of the Last Small Cross, Quatrefoil, and Pointed Helmet types are listed. By contrast, there appear only 12 coins of Cnut Type B,⁶ 10 of Type A, 7 mules of Type A with Quatrefoil (Hildebrand varieties Aa and Eg), and 3 mules of Type B with Quatrefoil (Hildebrand varieties Ef and Ek).

Clearly neither Type A nor Type B can be regarded as a substantive type. Nor does Type B fit happily into the series as a transitional issue, either between Last Small Cross and Quatrefoil or between Quatrefoil and Pointed Helmet. On the other hand, we have to admit the possibility that Type A could be a continuation of Last Small Cross with the substitution of Cnut's name for Æthelræd's: this would satisfactorily explain the mules with Type A obverses and Quatrefoil reverses (var. Eg), since it is usual for the reverse of a mule to be of the later type, but would not account for the existence of mules the other way round (var. Aa). There are parallels to indicate that the death of a king did not automatically lead to a change of type, and that a change would only occur in such circumstances if it happened to fall due at that moment in the normal operation of the sexennial or triennial cycle. For example, the First Small Cross type, which began with Eadgar's recoinage, continued throughout the reign of Edward the Martyr and into the reign of Æthelræd, new obverse dies being distributed for use in each new reign.

¹ C. A. Nordman, *Anglo-Saxon Coins found in Finland*, Helsingfors, 1921.

² R. H. M. Dolley and F. Elmore Jones, 'An Intermediate Small Cross Issue of Æthelræd II and some late Varieties of the Crux Type', *B.N.J.* xxviii, pp. 75-87.

³ It is hoped that a monograph by R. H. M. D. on the Agnus Dei issue will appear in a future number of the *Commentationes*.

⁴ P. J. Seaby, 'The Sequence of Anglo-Saxon Coin Types, 1030-50', *B.N.J.* xxviii, pp. 111-46.

⁵ P. Hauberg, *Myntforhold og Udmyntninger i Danmark indtil 1146*, Copenhagen, 1900.

⁶ Hildebrand's summary of the reign (op. cit., p. 316) wrongly includes the 'Meonre' coin in Type E. His total of 11 for Type B must be adjusted accordingly.

Again, the Jewel Cross type, which may have been first issued just before the death of Cnut, continued during the two-year period of joint rule by Harold I and Harthacnut. It is therefore necessary to consider whether it is historically or numismatically probable that the Last Small Cross type did, in fact, continue into the reign of Cnut.

Æthelræd died on 23 April 1016, at a time when his kingdom was in the course of conquest by the Danish armies of Cnut. In London, his son, Eadmund (Ironside), was chosen to succeed him, and despite a representative gathering of church and nobles having declared for Cnut at Southampton, he soon established his rule in Wessex, while Cnut held Mercia and the Danelaw. Not until after the battle of Ashingdon, in October 1016, did London fall to Cnut, and then only as part of a settlement in which Eadmund was recognized as king of Wessex. However, Eadmund died on 30 November in the same year, and Cnut then became acknowledged king throughout the country. It is apparent, therefore, that Cnut could not have established a mint in London before November, or in Wessex before December, and it is very unlikely that any coinage in his name could in fact have been issued in London or Wessex before 1017. On the other hand, it would not be impossible for coins in his name to have been struck in Mercia or the Danelaw in 1016, though we would hesitate to admit the possibility that any were struck during Æthelræd's lifetime.

The theory that the coin-type was changed sexennially appears to suggest that a change was due some months before Æthelræd's death, for if Eadgar's recoinage can be dated to Michaelmas 973,¹ the Last Small Cross issue should have commenced at Michaelmas 1009 (although some allowance may have to be made for the abortive Agnus Dei issue) and should have been due for replacement at Michaelmas 1015. It is not difficult to see, in the divided state of the country, the reason why no change was made at that time, although the existence in Bergen of a broken coin of impeccably English style, from a Last Small Cross reverse die of the London mint and an obverse in the name of Æthelræd bearing a design remarkably like that later adopted for Cnut's Pointed Helmet type, suggests that trials for a new type were in fact carried out.² After his father's death Eadmund was in no position to effect a recoinage throughout the country, and as no coins of his have survived, it is unlikely that any minting in his name took place in London or Wessex during his short reign. Nor is there any reason to suppose that Cnut would have ordered a recoinage in the part of the country under his control, but as he is unlikely to have prolonged the currency of the Last Small Cross issue after Eadmund's death he may be expected to have introduced a new type (Quatrefoil) at a convenient date during 1017. If any coins were struck in his name before then, they would almost certainly have been of the Last Small Cross type, and we must look for them at mints in Mercia and, more especially, the Danelaw.

Although Type A is the only minor type of Cnut which the sexennial

¹ Cf. the paper cited above, p. 235, n. 2: see also for the Michaelmas change of type the 1961 *Yearbook of the British Association of Numismatic Societies*, pp. 17-26.

² The Bergen coin, although illustrated by a line-engraving on p. 14 of the 1869 *Vidensk.-Selsk. Forhandling* account of the Tjore find, was ignored by English numismatists until 1957. It will be discussed in detail in an appendix to the forthcoming Agnus Dei monograph, *supra* p. 236, n. 3.

recoinage theory could possibly accommodate within the English series, we have considered in addition the coins of Type B and of other minor types and varieties listed by Hildebrand which cannot be regarded simply as varieties of the main substantive types. We have found extensive die-linking, which frequently involves coins apparently of substantive types of Æthelræd, Cnut, and in one instance Harthacnut, and die-linking on such a scale is of itself a powerful indication of Scandinavian minting.

Analysis of the Material

The analysis which follows is in three parts. In Part A we list and discuss each coin recorded by Hildebrand for Types A and B and their mules with other types (notably Quatrefoil), together with such other coins of these types recorded elsewhere as seem to us to be relevant to the study of the Hildebrand coins. We have also included coins of the Quatrefoil type which are die-linked into the series. In Part B we discuss certain relevant coins in the name of Æthelræd, and in Part C we analyse briefly a die-chain which was first noticed by Hauberg and which links together some later varieties of Cnut with a number of coins of Harthacnut, all of which are Scandinavian. Finally, we state our general conclusions, and indicate briefly which types and varieties of Cnut and Harthacnut can be regarded as Scandinavian and which as English.

In order to save space, the following abbreviations are used:

	Hild.	denotes	Hildebrand
LC	„	the	Long Cross type of Æthelræd
H	„	the	Helmet type of Æthelræd
LSC	„	the	Last Small Cross type of Æthelræd
Q	„	the	Quatrefoil type of Cnut
PH	„	the	Pointed Helmet type of Cnut
SC	„	the	Short Cross type of Cnut

A number prefixed by	Æ	refers to	Hild.'s catalogue under Æthelræd
„	„	CN	„ Hild.'s catalogue under Cnut
„	„	HC	„ Hild.'s catalogue under Harthacnut
„	„	N-CN	„ Nordman's catalogue under Cnut
„	„	INV.	„ the inventory kept in the Royal Swedish Coin Cabinet of coins found in Sweden
„	„	K	„ the collection of the Royal Danish Coin Cabinet, Copenhagen
„	„	Bruun	„ the Bruun collection, Copenhagen.

In Parts A and B, when indicating whether a moneyer is recorded by Hildebrand, we have concerned ourselves only with the supposed mint of issue of the coin in question, and with the substantive types from LC to SC inclusive. References to moneyers should, therefore, be interpreted in this context. The coins are arranged in groups according to the combination of obverse and reverse types: thus in Part A, coins in Groups 1-3 have obverses of Type A, combined with reverses of Type A, Quatrefoil, and Type B respectively; in Groups 4-6 the obverses are of Type B and the reverses of Type B, Quatrefoil, and Pointed Helmet; and in Groups 7-10 the obverses are of the Quatrefoil

type and the reverses of Quatrefoil, Type A, Type B, and Helmet respectively. The plates, on the other hand, are arranged on the basis of die-linking, such linking being denoted by bars joining two or more coins together. The individual photographs of the coins were not all enlarged to precisely the same extent, with the result that there are apparent differences in size on the plates between coins which are die-linked together.

A. COINS OF CNUT OF HILD. TYPES A AND B AND MULES WITH OTHER TYPES

Group 1 (Hild. Type A)

CN 639. 'York', +HEARDECNVT MO EOF, 1.40 gm., Pl. XII, D. No moneyer of this name is otherwise recorded by Hild. The portrait is similar to 'Northern A' of *LSC*, and also resembles in style that of the *Q* coins of the Lincoln area. The obverse is from the same die as CN 3553, 'Torksey' (Group 2), and the position of the coin in die-chain D suggests a Scandinavian origin.

CN 2049. 'London', +BRIHTNOÐ MƿO LVD, coin not available for weighing, Pl. XIII, K. The moneyer is recorded by Hild. for *LC*, *Q*, *SC*. The portrait does not resemble any *LSC* or *Q* style: note the spelling AGLORM. See also CN 2734 and CN 2739 below, which are from the same obverse die, and CN 2050 (Group 8) which is from the same reverse die. The coin's position in the remarkable die-chain K indicates Scandinavian origin.

CN 2733. 'London', +ÐORCETL MƿO LVND, 1.26 gm., Pl. XIII, O. The moneyer is recorded by Hild. for *PH*. The obverse closely resembles that of CN 2049.

CN 2734. 'London', +ÐORCETL MƿO LVND, 1.64 gm., Pl. XIII, K. The weight is significantly heavy, and the coin is from the same obverse die as CN 2049. The reverse is similar to CN 2733.

CN 2739. 'London', +ÐORCL MƿO LVND, 1.52 gm., Pl. XIII, K. The moneyer is not otherwise recorded in this form by Hild. The obverse is from the same die as CN 2049; the reverse is from the same die as Æ 2944 (Group 13), an apparent mule of *LC* and *LSC*, which in turn is die-linked to the Asthrið group of 'Norwich' through Æ 3104 (Group 11).

CN 2907. 'Norwich', +ELFRIC MOGLV M NOR, 1.64 gm., Pl. XII, C. The moneyer is not otherwise recorded by Hild. with the suffix MOGLV, which has no obvious meaning, but Ælfric is recorded for *LC* to *LSC* and *PH*. The obverse is similar in style to the coins of die-chain B, which are unquestionably Scandinavian, and the weight is significantly heavy.

CN 2971. 'Norwich', +OZPOLD MON ONRÐ, 1.22 gm., Pl. XII, A. The moneyer is recorded by Hild. for *LSC* and *Q*. The reverse die was very similar to that used to strike the *LSC* coin Æ 3183 (also illustrated), and was probably cut at the same time, but there is no die-link as claimed by Parsons.¹ The portrait and the epigraphy of Æ 3183 are of a style characteristic of East Anglia in *LSC*, and there is no reason to doubt that that coin was struck at Norwich. The obverse of CN 2971 is of a different style, however, which is not unlike 'Northern A' of *LSC* and which is certainly to be distinguished from that found on other Type A coins. There is no direct evidence that the coin was not struck at Norwich,

¹ H. A. Parsons, 'The Anglian Coins of Cnut the Great', *B.N.J.* xix, pp. 25-67.

but the circumstantial evidence of the other coins of the type suggests that it was not, in which case the dies must have been removed to Scandinavia.

CN 3624. 'Weybridge?', +SVARTCOL M^o PIB, 1.38 gm., Pl. XII, E. The moneyer is not otherwise recorded by Hild. This coin was claimed for the Danish series by Hauberg,¹ as were CN 3625 and 3626 which are from the same obverse die. The letter punches are similar to those on CN 2049, and the portrait may be by the same engraver. The obverse die—in a worn condition—was also used to strike the Group 2 coins CN 1446 ('Chester (Leicester)'), CN 2741 ('London'), CN 3243 ('Stamford') and K 786 ('Sudbury'). There is no doubt that all these coins are of Scandinavian origin.

CN 3625. 'Weybridge?', from the same dies as CN 3624, but struck on a square flan, 2.03 gm., not illustrated.

CN 3626. 'Weybridge?', +SVARTCOL MO PIBR, 1.52 gm., Pl. XII, E. See CN 3624, which is from the same obverse die.

N-CN 285. Barbarous reverse, +HEOINEIOR M^o BNE:, 1.55 gm., Pl. XII, B. The obverse die is also found associated with a *Q* reverse of 'Huntingdon' (N-CN 85, Group 2) and a barbarous Type B reverse (Bruun 1055, Group 3), and appears to be by the same hand as, for example, CN 2907 (see above) and CN 3050 (Group 4). The coins of die-chain B are undoubtedly Scandinavian.

Group 2 (Mules with Type A obverse and Quatrefoil reverse—Hild. Eg)

CN 1446. 'Chester (Leicester)', +A?/.LPI/M^o O/LEH/, 1.33 gm., Pl. XII, E. The moneyer(s) Ælfwi(g), Æthelwi(g) are recorded by Hild. for *LSC* and *Q* and Ægelwig (= Æthelwig) for *PH*. The reverse reading is improbable for an English coin of Leicester, but in any case the obverse die-link to CN 3624, 'Weybridge?' (Group 1) is sufficient to establish the Scandinavian origin of this coin, as of CN 2741, CN 3243, and K 786 below.

CN 2741. 'London', +ÐO/RÆÐ/MOL/VNÐ/, 1.62 gm., Pl. XII, E. The moneyer is otherwise only recorded by Hild. for *Q*, but the single coin, CN 2740 (Group 7) is from the same reverse die. See also above, CN 1446, which is from the same obverse die.

CN 3243. 'Stamford', +CA/PLIN/MOS/TAN/, 1.24 gm., Pl. XII, E. The moneyer is recorded by Hild. for *Q* and *PH*. See above, CN 1446, which is from the same obverse die.

CN 3553. 'Torksey', +ÐV/RCE./TELO/TOR/, 1.49 gm., Pl. XII, D. The moneyer is recorded by Hild. for *LSC*, *Q*, and *PH*, though the only *Q* coin, CN 3552 (Group 7) was struck at an earlier date from the same reverse die. The obverse die-link to CN 639, 'York' (Group 1), the rusty state of the reverse die when it struck CN 3553, and the history of the obverse die which struck CN 3552, all point to Scandinavian minting.

N-CN 85. 'Huntingdon', +RIÐ/NPN/EOI/HVNÐ/, 1.31 gm., Pl. XII, B. The reverse legend is, in fact, barbarous, and the obverse die-link to N-CN 285 (Group 1) and Bruun 1055 (Group 3) leaves no doubt that the coin is Scandinavian.

K 786. 'Sudbury' (or 'Southwark'), +ELI/EMO/MOS/VÐB (or G)/, 1.37 gm., Pl. XII, E. No moneyer of this name is recorded by Hild. at Sudbury or at Southwark. See above, CN 1446, which is from the same obverse die.

¹ Hauberg, *op. cit.*, p. 115.

Group 3 (Mule with Type A obverse and Type B reverse—Hild.—)

Bruun 1055. Barbarous reverse, 1.05 gm., Pl. XII, B. The obverse is from the same die as N-CN 285 (Group 1) and N-CN 85 (Group 2), and the coin is undoubtedly not English.

Group 4 (Hild. Type B)

We have no doubt that none of the coins of this group, nor of the two following groups, were struck in England. They are usually of inferior work, the reverse legend is frequently blundered, the weight is extremely variable, and so far as we know, none has been found in an English hoard. Certain of the obverses resemble closely in style a similar coin struck in the name of Olaf Haraldsson (St. Olaf) of Norway (Fig. 1), the reverse of which reads +A·S·ÐRI·Ð·MO/NOR/ and is from a die which must have been cut at virtually the same time and by the same hand as that used to strike CN 2911 (see below) and the other coins to which the latter is die-linked. The same letter punches were used to cut the two dies, as can be seen, for example, from the letter l. We are grateful to Antikvarie L. O. Lagerqvist of the Royal Swedish Coin Cabinet for bringing this coin to our notice, for it establishes beyond reasonable doubt that the Asthrith coins—and therefore in all probability the other Type B coins—are of Scandinavian origin.



FIG. 1.

CN 49. 'Bath', +ELF/RICI/MOB/AÐV/, 1.36 gm., Pl. XIV, S. The moneyer Ælfric is recorded by Hild. for LC to SC inclusive, but the spelling is never Elfrici. The contraction MO is not found at Bath after H.

CN 1535A. 'Lincoln', +CO/LGR·/IMOL/INCO/, 1.29 gm., Pl. XII, J. This coin is not listed in Hild.'s catalogue, but lies next to CN 1535 (a true SC coin of Lincoln) in the trays of the Systematic Collection. The moneyer is recorded by Hild. for LC, PH, and SC (perhaps there were two moneyers of this name). The obverse resembles in style CN 3118, 'Shrewsbury' (see below) which die-linking proves to be Scandinavian.

CN 2675. 'London', +OB/NMO/NRH/LVNÐ/, 0.89 gm., Pl. XIV, T. No moneyer Oban is recorded by Hild.; the reverse legend is, in fact, blundered. The weight is significantly light.

CN 2732. 'London', +ÐOR/ÆÐM/OLVI/NDE/, 0.94 gm., Pl. XIV, U. The moneyer is only recorded otherwise for CN 2740 (Group 7) and CN 2741 (Group 2), which form part of die-chain E and are not English.

- CN 2896. 'Meonre—(?)', +OD:/AM'O/MEO:/NRE/, 1.22 gm., Pl. XII, F. This 'mint' is otherwise unknown, and we have no doubt that it does not exist. The obverse is from the same die as CN 3050, 'Oxford' (see below) and the reverse is from the same die as Bruun 742 (Group 9) which is die-linked to a Quatrefoil coin, CN 3518, of 'Thetford' (Group 7).
- CN 2908. 'Norwich', +ÆÐ/ELP*/OLD:/NOR/, 1.06 gm., Pl. XIV, Q. The moneyer is not otherwise recorded by Hild. except for CN 2909.
- CN 2909. 'Norwich', from the same reverse die as CN 2908, but struck on a square flan, 1.94 gm., Pl. XIV, Q. A square flan is strongly indicative of Scandinavian minting.
- CN 2911. 'Norwich', +AS/ÐRI:/ÐMO:/NOR/, 2 specimens, 1.60 and 1.70 gm., Pl. XIII, K. The moneyer is not recorded by Hild. except for Æ 3104, a *LC* coin (Group 11) and Æ 3105, a *LSC/LC* mule (Group 15) of anomalous obverse style; both these coins are from the same reverse die as CN 2911 and cannot be English. There is an obverse die-link from Æ 3104 to Æ 2944, 'London' (Group 13) and thence to the Cnut Type A coins of Thorel, Thorcetl, and Brihtnoth (Group 1). As if this were not enough, the reverse of CN 2911 also die-links to a Stockholm Inventory coin, INV. 20879–619 (Group 9), the obverse of which is from the same die as CN 2670, 'London' (Group 7), CN 154, 'Canterbury' (Group 8) and CN 2200, 'London' (Group 9), a die which was undoubtedly manufactured in London before being taken to Scandinavia. The close affinity between CN 2911 and the coin of Olaf Haraldsson of Norway illustrated in Fig. 1 has already been discussed.
- CN 2912. 'Norwich', from the same reverse die as CN 2911, 2 specimens, 1.16 and 1.02 gm., Pl. XIII, K. The wide disparity in weight between these coins and the two specimens of CN 2911 is significant.
- CN 3050. 'Oxford', +PV/LFPI/ÑEMO/NOX/, 1.22 gm., Pl. XII, F. The moneyer is recorded by Hild. for *LC*, *Q* (PVLPI), *PH* and *SC*. The obverse is from the same die as CN 2896, 'Meonre' (see above).
- CN 3079. 'Rochester', +LE/OFPI/ÑEMO/ROC/, 1.02 gm., Pl. XIV, P. The spelling ROC is never found on coins of the Rochester mint, but CROC is frequently used on coins of Cricklade: however, the moneyer is not recorded by Hild. at either mint. The obverse is from the same die as INV. 16295–418, 'London' (see below).
- CN 3118. 'Shrewsbury', +ÆLF/HEH/MΩO/SCRO/, 2 specimens, 1.54 and 1.45 gm., Pl. XII, G. The moneyer is recorded by Hild. for *LC* only; the reverse die appears to have been copied from one of the *LC* coins. The obverse is from the same die as CN 253, 'Cricklade' (Group 5), the die-chain ultimately ending in a coin with a barbarous *Q* obverse (N-CN 286, Group 7).
- CN 3567. 'Ustla (?)', +VLF/CETL/MOV/STL/, 1.00 gm., Pl. XII, H. The moneyer is recorded by Hild. for one *LC* and one *LSC* coin, the former (Æ 3864, Group 11) being from the same reverse die as CN 3567 and from an obverse die which was not of English *LC* style. The *LSC* coin (Æ 3863, Group 14) is of 'Northern A' style and may be from dies which were made by a York engraver. The style of the obverse of CN 3567 is quite different from that of any other Type B coin, but is nevertheless not an English style.
- N-CN 284. Blundered reverse, 1.68 gm., Pl. XIV, R. Stylistically, this coin resembles CN 2908, 'Norwich' (see above).

INV. 16295-418. 'London', +ÆPI/NEM/OLV/NDE/, 1.37 gm., Pl. XIV, P. The moneyer Ælfwine is recorded by Hild. for *LC* to *SC* inclusive, but never spelt as on this coin. The obverse is from the same die as CN 3079, 'Rochester' (see above).

Group 5 (Mules with Type B obverse and Quatrefoil reverse—Hild. Ef)

These coins, by virtue of their obverse type, can confidently be assigned to Scandinavia.

CN 253. 'Cricklade', +HI/LDR/EDM/OCR/, 1.18 gm., Pl. XII, G. The moneyer is not recorded by Hild. at Cricklade, except for the *Q* coin CN 252 (Group 7) which is from the same reverse die; nor is he recorded at Crewkerne or Shrewsbury. The contraction MO is not found at any of these mints in the *Q* issue; furthermore, the same reverse die was used to strike N-CN 286 (Group 7) which has a barbarous obverse. The obverse of CN 253 is from the same die as CN 3118, 'Shrewsbury' (Group 4).

CN 2020A. 'London', +BR/HTN/OÐM/LVN/, 1.74 gm., Pl. XIII, L. This coin is not listed in Hild.'s catalogue, but lies next to CN 2020 (Group 7) in the trays of the Systematic Collection. It is from a quite barbarous obverse with an unintelligible legend. The reverse is from the same die as CN 2020.

Group 6 (Mule with Type B obverse and Pointed Helmet reverse—Hild. Gb)

CN 1843. 'Lincoln', +PVLFPINE ON LII (or LV?), 1.12 gm., Pl. XIV, V. The moneyer is recorded by Hild. at Lincoln for *H*, *PH*, and *SC*, and at London for *LC* to *SC* inclusive. The obverse legend is contracted by comparison with other Type B obverses, and the coin, while Scandinavian, appears to be later in date than the others of this series.

Group 7 (Quatrefoil coins which die-link to coins of other groups)

CN 193. 'Cesth (?)', +ÆLF/SIG•/EMOC/ESÐ•/, 1.28 gm., Pl. XIII, K. This mint-signature is not recorded by Hild. (or elsewhere) for any other type. Obverse and reverse are of a style associated with Lincoln, the north and east Midlands, and East Anglia, and the portrait indicates a moderately early date within the type. If 'Cesth . . .' was an English mint, the question of its identity poses itself. The possibility that the dies were intended for export must, however, be borne in mind, since the obverse die ultimately reached Scandinavia and was used there in striking CN 2050, 'London' (Group 8), a *Q/LSC* mule, and N-CN 35, 'York' (Group 10), an impossible *Q/H* mule, both of which are condemned by further die-linking. It is not possible to establish with certainty in the present state of our knowledge where this coin was issued, but the balance of probability is in favour of Scandinavia: the good condition of the dies when the coin was struck must, however, leave some doubt to be resolved. There is a *Q* fragment (CN 194) which appears to bear the same mint-signature but has a moneyer's name beginning ÐV . . .; the obverse is of an East Anglian style (cf. CN 3780 below) and has not so far been die-linked into this series.

CN 252. 'Cricklade', +HI/LDR/EDM/OCR/, 1.41 gm., Pl. XII, G. See CN 253 (Group 5), which is from the same reverse die, for a discussion of the moneyer and mint attribution. The obverse is of a late Lincoln style which is associated with a light weight standard, about two-thirds of the weight of this coin. Although

the obverse die was probably of English manufacture, the reverse die-links to CN 253 and to N-CN 286 (see below) establish the coin as not English.

CN 2019. 'London', +BR/HTN/OÐM/LVN/, 1.49 gm.

CN 2020. 'London', from same reverse die as last, 1.09 gm. } Pl. XIII, L.

CN 3780. 'Winchester', +LE/OFN:/OÐM/OPIN/, 1.31 gm. }

The obverse of CN 2019 and CN 3780 is of a style which is found chiefly at East Anglian mints and, in particular, Thetford. The portrait and the ending *ANGLOX* are characteristic of this style, which is also occasionally found at London but never (CN 3780 apart) at Winchester. The obverse of CN 2020 is of Lincoln style, which is also occasionally found at London. However, the die-linking between these coins (CN 2019 and CN 3780 are from the same obverse die), and in particular the fact that the 'London' reverse die was also used to strike CN 2020A (Group 5) in conjunction with a barbarous and unintelligible Type B obverse, indicates that they were struck in Scandinavia.

The similarity between the obverses of CN 865 (Group 8), CN 193 (see above), and CN 2020 is worth noting: the legends all end in *-ORV:*, and the three dies may have been made at Lincoln at the same time, possibly for export. Moreover, most, if not all, of the *Q* coins which bear Cnut's Danish title are from a single obverse die of similar style, and one of them (Hauberg, pl. i, 3) is apparently from the same reverse die as CN 3780.¹ It seems likely that this obverse die, too, was made at Lincoln; it was ultimately used with a number of barbarous reverse dies which were doubtless of local Scandinavian manufacture (see, for example, Hauberg, pl. i, 2, and pl. ii, 5).

CN 2670. 'London', +LYF/INC/ONL/VND/, 1.21 gm., Pl. XIII, K. The moneyer is recorded by Hild. for *LC* to *Q* inclusive. Were it not for its position in die-chain K, we would not hesitate to say that this coin was struck at the London mint. The obverse die was undoubtedly of London manufacture, not of the earliest style produced at London but nevertheless not of the abundant later style in which the fleurs are attached to the band which follows the shape of the head, and which continues as a separate line, parallel to the neck and shoulder line, until it meets the quatrefoil. The reverse die was also of London manufacture: the epigraphy, and the shape of the quatrefoil, are typical of coins of this style, and the use of a trefoil instead of a single pellet at the point of one of the cusps is one of those quirks which are characteristic of the London mint at this period and which bring to mind the marking of the coins of the later Middle Ages. The weight is also right for a coin of the style in question.

However, the obverse die was also used in association with a 'Canterbury' *LSC* reverse (CN 154, Group 8), a 'London' *LC* or Type B reverse (CN 2200, Group 9) and—most significantly—the *Asthrið* *LC* or Type B reverse (INV. 20879–619, Group 9). At some stage, therefore, it must have been taken to Scandinavia: was CN 2670 struck from it before or after this happened? Examination of the photographs suggests that CN 154 was struck first: the rust marks are least apparent on that coin, and the crack which joins the final R to the quatrefoil is scarcely noticeable. Of the other three coins it is probable that CN 2200 was the earliest to be struck, but there is little to choose between CN 2670 and the *Asthrið* coin; the die was in poor condition and there cannot have been much lapse of time between them. It seems likely, therefore, that CN 2670 is a Scandinavian striking, and the rust marks visible on the reverse tend to confirm this.

CN 2671. London, from the same reverse die as CN 2670, 1.45 gm., Pl. XIII, K.

¹ Hildebrand, *op. cit.*, p. 196, and footnote p. 312.

The reverse is, however, free from rust marks, proving that this coin was struck earlier than CN 2670. The obverse is of an earlier (and heavier) London style, and the weight is reasonable for a coin of this style. Despite the faulty striking, the probability is that it was struck at London.

CN 2740. 'London', +ÐO/RÆÐ/MOL/VNÐ/, 1.00 gm., Pl. XII, E. See CN 2741 (Group 2) which is from the same reverse die. The obverse is of a style not otherwise found in the *Q* type and this, together with its position in die-chain E and the Scandinavian name of the moneyer, indicates that the coin is not English.

CN 3518. 'Thetford', +NA/NAȳ/ONÐ/ETF:/, 0.73 gm., Pl. XII, F. The moneyer Mana is recorded by Hild. for *LC* to *LSC*. The obverse is from the same die as Bruun 742 (Group 9), which has the meaningless mint-signature MEONRE and is from the same reverse die as the Type B coin, CN 2896 (Group 4). The style of the obverse appears to be early Lincoln, but may be derivative; the portraiture is not dissimilar to that found on CN 2896. On this evidence, taken with the exceptionally light weight, the attribution to Thetford cannot be sustained.

CN 3552. 'Torksey', +ÐV/RCE./TELO/TOR/, 2 specimens, 1.39 and 1.09 gm., Pl. XII, D. See CN 3553 (Group 2) which is from the same reverse die. The obverse is of York style, and apparently from a die of English manufacture. However, the use of the same die to strike CN 1447 (Group 9) and N-CN 241 (Group 8), both coins with blundered reverses, shows that it must have been taken to Scandinavia. It is just possible, but improbable, that CN 3552 was struck in England before the removal of the dies (cf. CN 193 and CN 2670).

CN 3780. 'Winchester', see under CN 2019.

N-CN 286. 'Cricklade', +HI/LDR/EDM/OCR/, 1.48 gm., Pl. XII, G. See CN 253 (Group 5) and above, CN 252, which are from the same reverse die. The obverse is quite barbarous and unintelligible. This coin strengthens the rejection from the English series of the other coins in die-chain G.

Group 8 (Mules with Quatrefoil obverse and Type A reverse—Hild. Aa)

CN 154. 'Canterbury', +L·EOFRIC ON CNTPA*, 2 specimens, 0.97 and 1.15 gm., Pl. XIII, K. The moneyer is recorded by Hild. for *LC* and *H*. See CN 2670 (Group 7) for a discussion of the obverse die from which this coin was struck. The reverse appears to be from a normal *LSC* die of the Canterbury mint, although no true *LSC* coin from this die has so far been located. The reverse die-link to Æ 194 (Group 13), a *LC/LSC* mule from an undoubtedly English *LC* obverse die which was in a rusty condition, might at first sight indicate a defaulting workman at the mint, coining in secret: however, coins of an obsolete type would soon have been detected, and this explanation must be rejected. The obverse die-link to CN 2670, &c., makes it probable that both CN 154 and Æ 194 were struck in Scandinavia from English dies, and the recent discovery of a coin from the same obverse die as Æ 194 combined with a barbarous *LSC*-type reverse (Fig. 2) lends support to this view.¹

CN 865. 'York', +PVL SIGE M·O EOFRI, 1.28 gm., Pl. XIII, N. The moneyer is recorded by Hild. for *LC* to *LSC*. There is no reason to doubt that the dies for this coin were of English manufacture, and a true *LSC* coin from the reverse die may one day be found. The obverse *Q* die is of a style associated with the Lincoln area and not found at York except in a crude form on coins of irregular manufacture, which are probably Scandinavian. This die dates from relatively

¹ Coin in the cabinet of Dr. E. J. Harris.

early in the currency of the *Q* type, since similar dies struck true coins on a high weight standard: it appears to have been made at the same time as those used to strike CN 193 and CN 2020 (Group 7). It is most unlikely that this is a true *Q/LSC* mule struck at York, and we believe that it was minted in Scandinavia.



FIG. 2.

CN 2050. 'London', +BRIHTNOÐ M T O LVD, 1.09 gm., Pl. XIII, K. See CN 2049 (Group 1) which is from the same reverse die, and CN 193, 'Cesth (?)' (Group 7) and N-CN 35, 'York' (Group 10) which are both from the same obverse die. The latter was, as has been pointed out in connexion with CN 193, of English manufacture, but it appears to have been well worn when it struck CN 2050. This, taken with its position in die-chain K, is sufficient to identify the coin as of Scandinavian origin.

N-CN 241. 'Tamworth?', +LOEPMF N T O TAF retrograde, 2.05 gm., Pl. XII, D. The reverse legend is, in fact, barbarous, and the weight is impossible for an English coin of this period. See also CN 1447, 'Leicester' (Group 9) and CN 3552, 'Torksey' (Group 7) which are from the same obverse die. The coin undoubtedly reinforces the conclusion that all the coins in die-chain E are Scandinavian.

Group 9 (Mules with Quatrefoil obverse and Type B reverse—Hild. Ek)

CN 1447. 'Chester (Leicester)', /LOH/FMM/OLE/NA+, (?), 2 specimens, 1.42 and 2.14 gm., Pl. XII, D. Neither the moneyer's name nor the mint is capable of intelligent interpretation: Lena is never found as a reading for Leicester. See CN 3552, 'Torksey' (Group 7) and N-CN 241 (Group 8, with blundered reverse) which are both from the same obverse die. The weight of the second specimen is impossible for an English coin of the period.

CN 2200. 'London', +EA/DPO/LDM/LVN/, 0.98 gm., Pl. XIII, K. The moneyer is recorded by Hild. for *LC* to *SC* inclusive. The reverse die could be of English manufacture; for a discussion of the obverse die and of the coin generally see CN 2670 (Group 7) which is one of several coins from the same die. It is unlikely that this coin was struck in England before the obverse die found its way to Scandinavia.

INV. 20879-619. 'Norwich', +AS/ÐRI:ÐMO./NOR/, 1.13 gm., Pl. XIII, K. See CN 2911 (Group 4) which is from the same reverse die. This is the vital link in die-chain K to which reference is also made under CN 2670, 'London' (Group

7): the obverse is from a die of London manufacture—the same as struck CN 2200—which must have reached Scandinavia before this coin was struck.

Bruun 742. 'Meonre (?)', +OD:/AM'O/MEO:/NRE/, 0.91 gm., Pl. XII, F. See CN 2896 (Group 4) which is from the same reverse die, and CN 3518, 'Thetford' (Group 7) which is from the same obverse die. The coin is not English.

Group 10 (Mule with Quatrefoil obverse and Helmet reverse—Hild.—)

N-CN 35. 'York', +BR*/EHT/NOÐ/MOE/, 1.54 gm., Pl. XIII, K. The moneyer is recorded by Hild. for *H* to *PH*, though the *H* coin, Æ 644 (Group 12) is in fact a mule of *LC/H* and is from the same reverse die. This die-link, taken in conjunction with the obverse die-link to CN 2050, 'London' (Group 8) and CN 193, 'Cesth (?)' (Group 7) and the combination of types on the coin itself, is sufficient to relegate it to the Scandinavian series.

B. COINS IN THE NAME OF ÆTHELRÆD WHICH DIE-LINK TO OR ARE ASSOCIATED WITH COINS OF GROUPS 1–10

Group 11 (Long Cross)

Æ 206. 'Canterbury', +LEO/FRI/CMO/CÆN/, 1.12 gm., Pl. XIII, M. The moneyer is recorded by Hild. for *LC* and *H* (Æ 194, listed by Hild. as of *LSC* type, is a *LC/LSC* mule and is not of English minting—see Group 13—neither is CN 154—see Group 8). The obverse is not of English style, and the reverse lacks either of the usual contraction marks, Ω and \prime , between M and O. The same reverse die is found associated with an obverse of *LSC* type on Æ 209 (Group 15), which also struck an uncatalogued British Museum coin with an utterly barbarous reverse (Group 14), so that a Scandinavian origin is certain.

However, it is worth noting that Leofric is the moneyer named on the reverse of the *LC/LSC* mule, Æ 194 (Group 13), which is certainly from a genuine (though rusty) English *LC* die and probably a genuine *LSC* reverse die as well, but which, from the combination of types and from the position of the coin in die-chain K, must have been struck in Scandinavia. It is just possible that the obverse die for Æ 194 was associated with a reverse *LC* die of Leofric, from which was copied the die used to strike Æ 206.

Æ 1380. 'Huntingdon', +LE/OFN/MOV/NTA/, 1.05 gm., Pl. XIII, K. The moneyer Leofn(oth) is not otherwise recorded by Hild., and the spelling VNTA is not otherwise found at Huntingdon. The obverse is from the same die as Æ 644, 'York' (Group 12) and this establishes the coin as Scandinavian.

Æ 3104. 'Norwich', +AS/ÐRI:/ÐMO./NOR/, 1.16 gm., Pl. XIII, K. See CN 2911 (Group 4) which is from the same reverse die. The coin is crucial because the obverse, which is not of English *LC* style, die-links to Æ 2944, 'London' (Group 13) and thereby links the Brihtnoth, Thorcetl, and Thorcl group with the undoubtedly Scandinavian Asthrið group.

Æ 3864. 'Ustla (?)', +VLF/CETL/MOV/STL/, 1.26 gm., Pl. XII, H. See CN 3567 (Group 4) which is from the same reverse die. The obverse is not of English style, and the coin cannot be English.

Group 12 (Mule with Long Cross obverse and Helmet reverse—Hild.—)

Æ 644. 'York', +BR*/EHT/NOÐ/MOE/, 1.06 gm., Pl. XIII, K. Hildebrand mistakenly describes this coin as of his Type E (Helmet). See N-CN 35 (Group 10)

which is from the same reverse die. The obverse is mis-spelt (+ELDERDEX-ANGLO) and is not of English style: it die-links to Æ 1380, 'Huntingdon' (Group 11). The coin is undoubtedly Scandinavian.

Group 13 (Mules with Long Cross obverse and Last Small Cross reverse—Hild. Af)

Æ 194. 'Canterbury', +L·EOFRIC ON CNTPA·, 1.50 gm., Pl. XIII, K. See CN 154 (Group 8) which is from the same reverse die: it is there argued that this coin, though from dies of English manufacture, was probably struck in Scandinavia. See also Fig. 2 for a coin of this group, from the same obverse die and a barbarous reverse die.¹

Æ 2944. 'London', +ÐORCL MƿO LVND, 1.18 gm., Pl. XIII, K. See CN 2739 (Group 1) which is from the same reverse die, and Æ 3104, 'Norwich' (Group 11) which is from the same obverse die, for a discussion of the importance of this coin of Scandinavian origin.

Group 14 (Last Small Cross)

Æ 2668. 'London', +LEOFNOÐ MƿO LVNDE, a retrograde E in the field, 1.30 gm., Pl. XIII, M. The moneyer is recorded by Hild. for LC only, apart from this coin. The obverse die-link to the barbarous BM coin below, and to Æ 209, 'Canterbury' (Group 15), indicates a Scandinavian origin.

Æ 3183. Norwich, +OZPOLD MON ONRÐ, 1.24 gm., Pl. XII, A. See CN 2971 (Group 1) for a discussion of this apparently English coin.

Æ 3863. 'Ustla (?)', +VLFCETEL MƿO VSTLA, 1.50 gm., Pl. XII, H. This coin is discussed with CN 3567 (Group 4). It is probably Scandinavian, although the dies may be of York manufacture: if it is English, we cannot suggest the identity of the mint.

BMC 399. Barbarous reverse, 0.95 gm., Pl. XIII, M. See Æ 2668 above and Æ 209, 'Canterbury' (Group 15) which are from the same obverse die.

Group 15 (Mules with Last Small Cross obverse and Long Cross reverse—Hild. Da)

Æ 209. 'Canterbury', +LEO/FRI/CMO/CÆN, 1.13 gm., Pl. XIII, M. See Æ 206 (Group 11), which is from the same reverse die. The obverse is similar in style to 'Northern A', the dies for which may be presumed to have been cut at York, but there is also a close similarity of style to that typified by CN 2907 and N-CN 285 (Group 1). The obverse die-link to Æ 2668, 'London' and the barbarous BM coin (both Group 14) indicates a Scandinavian origin.

Æ 3105. 'Norwich', +AS/ÐRI:ÐMO./NOR/, 1.22 gm., Pl. XIII, K. See Æ 3104 (Group 11), CN 2911 and 2912 (Group 4), and INV. 20879-619 (Group 9) which are from the same reverse die. The obverse is not of English style, and the coin is undoubtedly Scandinavian.

¹ *Supra*, p. 245, n. 1.

C. SOME OTHER SCANDINAVIAN COINS IN THE NAMES OF CNUT AND HARTHACNUT

Die-chain Y on Plate XIV links together the single coins listed by Hild. under the following minor types and varieties of Cnut and Harthacnut:

Cnut

Hild. Ab	CN 2743. 'London',	+ÐVRCIL ON LVDI••	1.05 gm.
„ Ac	CN 2744.	„ „ „	0.80 gm.
„ Gc	CN 2508.	+GRIM ON LVNDI (2),	0.90, 0.78 gm.
„ Ic	CN 2749.	+VLEFCETL ON LVDI	0.72 gm.

Harthacnut

Hild. C	HC 142. 'London'	+ÐVRCIL ON LVDI••	1.00 gm.
„ G	HC 87. 'Lincoln'	+AL•. FRIC ON LINCOL•	1.19 gm.
„ Gb	HC 88.	„ „ „	1.06 gm.

together with the three 'London' coins of Hild. Ba of Harthacnut:

Hild. Ba	HC 104. 'London'	+ALFPINE ON LVDI	0.96 gm.
„	HC 139.	+OV:ÐENCARL ON LV	0.96 gm.
„	HC 145.	+VLEFCETL ON LVDI	1.03 gm.

and the following coins of regular types:

Pointed Helmet	CN 2745. 'London'	+ÐVRSTN ON LVDI	0.84 gm.
Jewel Cross	HC 140.	+ÐORCETEL ON LVDI:	0.90 gm.
„ „	HC 141.	+ÐORSTEN ON LVDI••	0.80 gm.
Arm and Sceptre	CN 2748.	+VLEFCETL ON LVDI	1.02 gm.

These coins were all claimed for the Danish series by Hauberg, who drew attention to every die-link which we have illustrated, with the exception of that between HC 142 on the one hand and CN 2743 and 2744 on the other hand.¹ All of them must have been struck at one mint in Scandinavia (Lund, according to Hauberg) towards the end of Harthacnut's reign.

Conclusions

To sum up, therefore, we confidently assign all coins in the name of Cnut of Hild. Types A and B, and the associated varieties Aa, Ef, Eg, Ek, and Gb, to a mint or mints in Scandinavia. The only possible exception is CN 2971, a 'Norwich' coin of Type A (Group 1) of the moneyer Oswold, and we doubt whether a single exception can in fact be sustained against the weight of evidence provided by the other coins.

The Quatrefoil issue is thus shown to be the first issue of coins in England in the name of Cnut. This accords well with the absence of coins in the name of Eadmund Ironside, and with the theory of sexennial recoinages as modified by force of circumstances at the end of Æthelræd's reign and immediately after his death. However, the obverse dies for the Type A coins, and to a lesser extent the reverse dies also, show unmistakable signs of English manufacture. Three possible explanations for this phenomenon suggest themselves. Firstly, the dies may have been cut at Lincoln, or possibly York, in 1016 for a projected issue of Last Small Cross coins in Cnut's name at mints under his

¹ Hauberg, *op. cit.*, pp. 112-22, also pp. 190 seqq.

control: this issue not being proceeded with for some reason, the dies were exported to Scandinavia. This explanation fails to account for the observed die-linking which involves Quatrefoil dies of English manufacture dating from some time after the introduction of the Quatrefoil type in England. Secondly, the dies may have been specially designed for a Scandinavian mint: this would more satisfactorily explain why some Type B obverses also appear to be of English workmanship, and would not be inconsistent with the export of a limited number of Quatrefoil dies (though why these should have been representative of no less than four regional styles, associated with London, Lincoln, York, and East Anglia, is a mystery). Thirdly, one or more engravers may have been sent to Scandinavia to cut dies there for local use: however, the limited number of dies from which the coins were struck casts serious doubt on this explanation—there can scarcely have been a day's work involved, and the production of the coins themselves can hardly have been an extended operation.

The problems of the origin and *raison d'être* of these Scandinavian coinages can best be approached and solved by Scandinavian scholars, in the context of other coinages of the region. Amongst the other problems which must also be considered are the association between certain of the coins which we have illustrated and those bearing Cnut's Danish title, and the significance of the moneyers' names recorded on the coins. We do not regard ourselves as competent to solve them, and indeed their solution is not within the scope of this paper: it is sufficient for our purpose that their existence should be recognized.

To complete our survey, we recall that Hauberg has already transferred to the Danish series Hild. Type C of Cnut (CN 2114, 'London', Pl. XIV, W, imitating Æthelræd's Helmet type) and D, Da, and Eh, as well as Ab, Ac, Gc, and Ic to which reference has already been made. Of the other minor varieties, one of us has elsewhere described as not English Ee, El, Hd, Ia, and probably Hc also.¹ We are left with five varieties of the Quatrefoil type (Ea, Eb, Ec, Ed, and Ei) which are—with the possible exception of one of the Ea coins—undoubtedly English; one variety of the Pointed Helmet type (Ga) of the two examples of which one (CN 2007) would seem certainly Danish;² two minor varieties of the Short Cross type (Ha and Hb) which are English; a Short Cross/Jewel Cross mule (Ka) and two Arm-and-Sceptre/Pacx mules (F) which are apparently English, though the latter date from the beginning of the reign of Edward the Confessor. The substantive types are, of course, Quatrefoil (E), Pointed Helmet (G), and Short Cross (H), the Jewel Cross issue (K) having probably commenced shortly before Cnut's death and the Arm-and-Sceptre type (I) being in reality Harthacnut's Type B with the king's name shortened.

Of the minor varieties of Harthacnut, Hauberg transferred all to Denmark with the exception of two Derby coins of Ba, which are in fact of B,¹ and

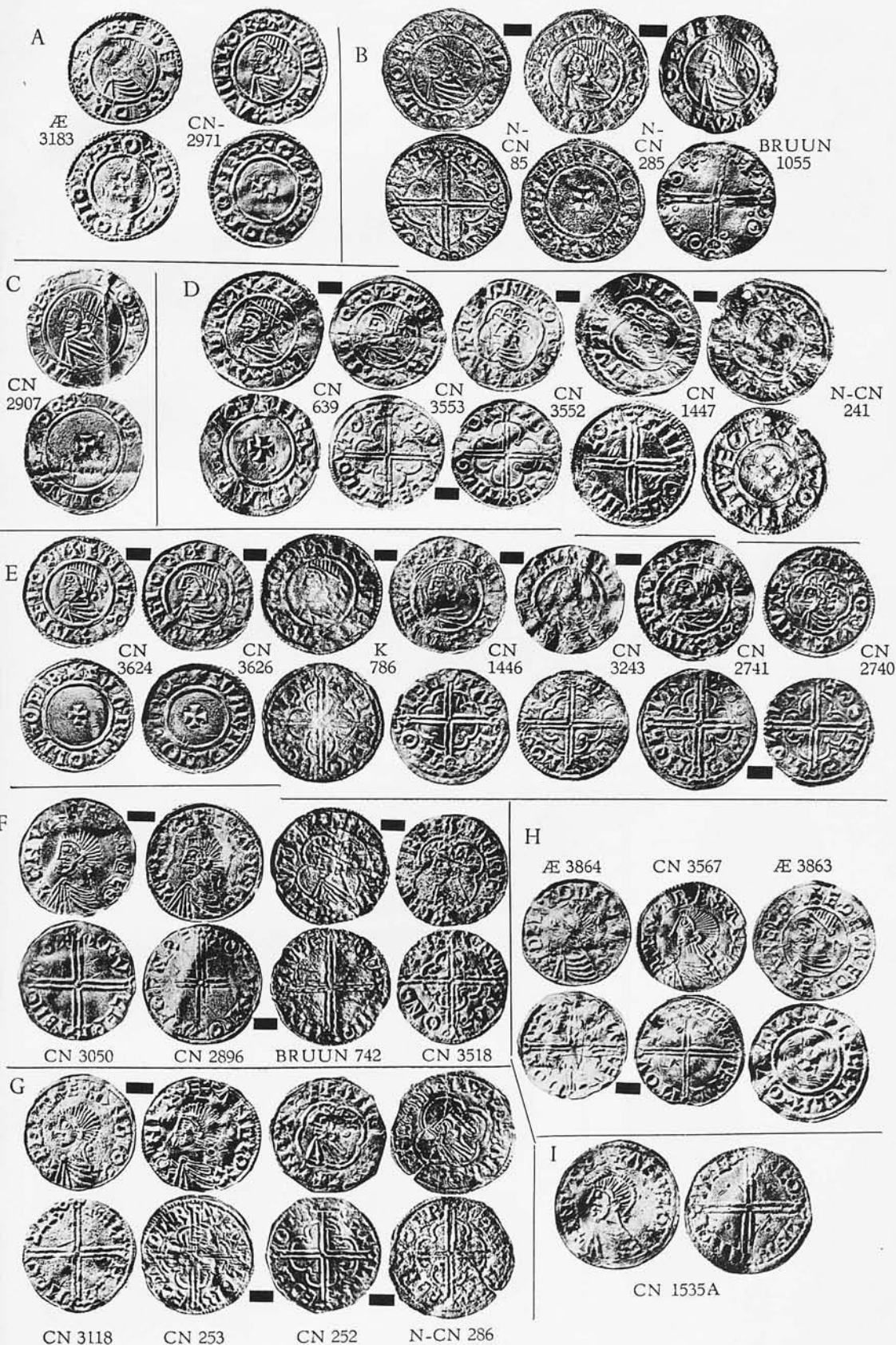
¹ G. van der Meer, 'Some Corrections to and Comments on B. E. Hildebrand's Catalogue of the Anglo-Saxon Coins in the Swedish Royal Coin Cabinet', p. 184, in *Anglo-Saxon Coins*, ed. R. H. M. Dolley, London, 1961.

² For the Danish coin cf. Hauberg, pl. ii, 19, and pl. iv, 1-4, &c. Hild. 1658, on the other hand, with its well-attested combination of Hiberno-Norse and OE. personal names seems certainly English.

³ G. van der Meer, *op. cit.*, p. 181.

the single coin of I which is another Arm-and-Sceptre/Pacx mule. Those remaining in the English series are therefore the Jewel Cross type (A and Aa, with left- and right-facing busts respectively) and the Arm-and-Sceptre type (B).

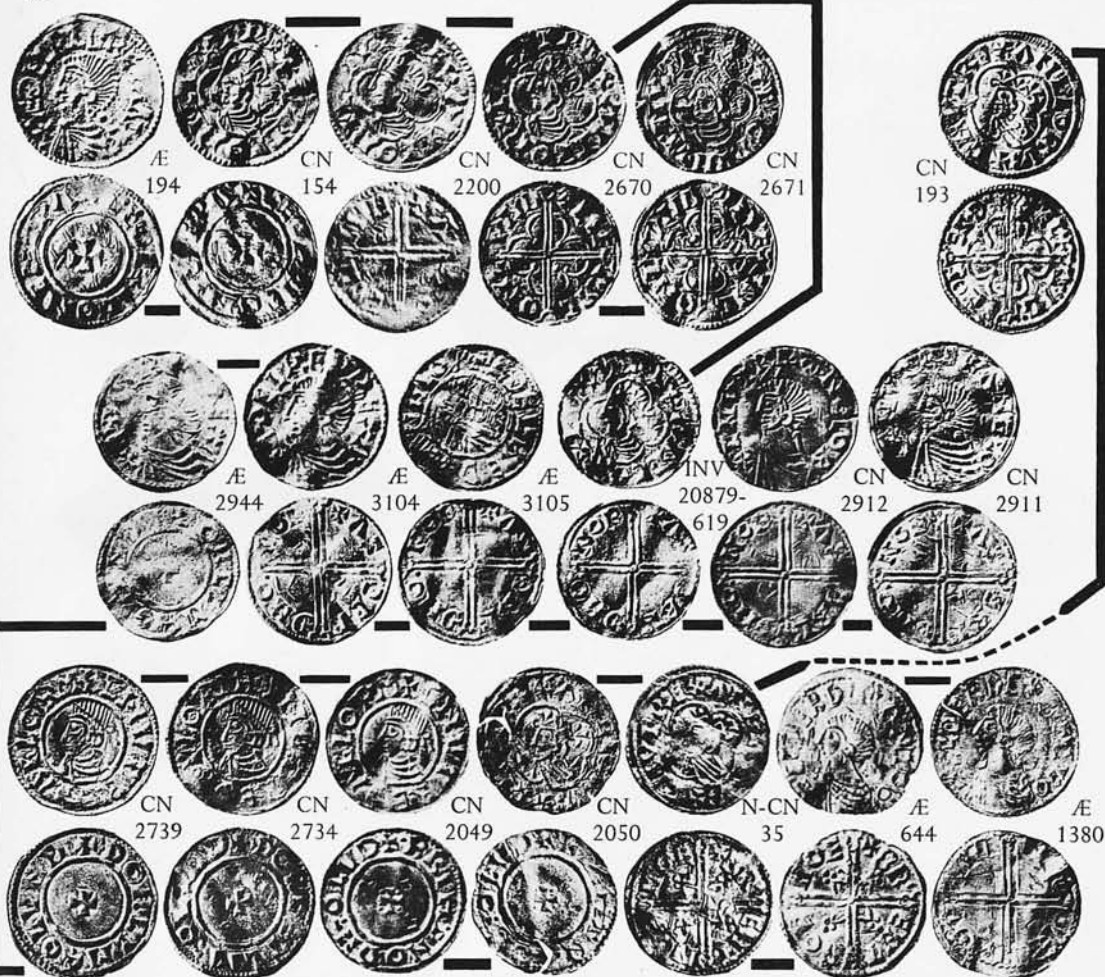
Our thanks are due to Förste Antikvarie Dr. N. L. Rasmusson and Antikvarie L. O. Lagerqvist of the Royal Swedish Coin Cabinet in Stockholm for supplying us with photographs and helping us in every possible way in our search for material for this paper. We also record our gratitude to the authorities of the Finnish National Museum in Helsinki and the Royal Danish Coin Cabinet in Copenhagen for supplying photographs of coins in their collections.



SCANDINAVIAN COINS OF CNUT (1)



K



L



N

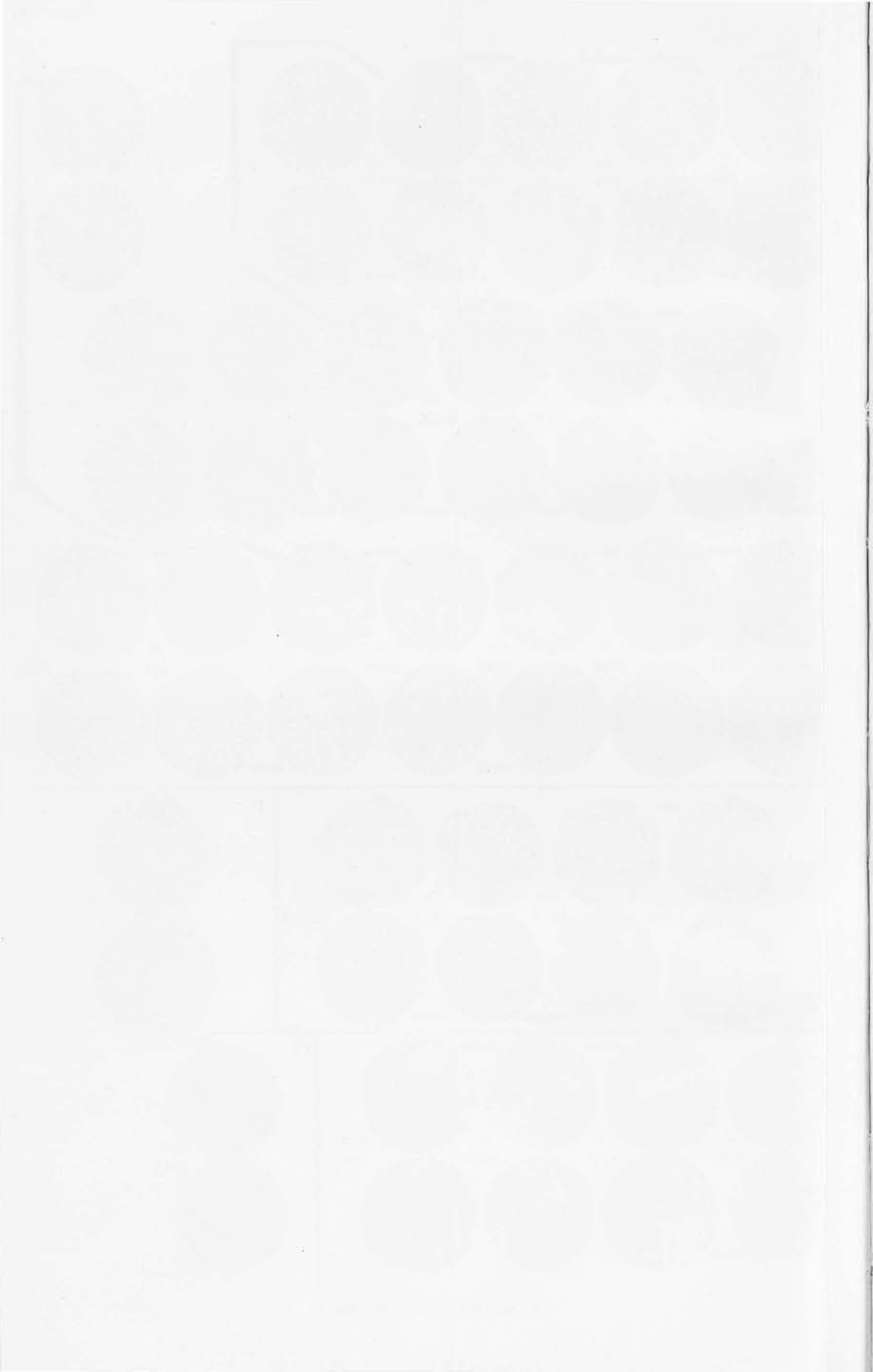


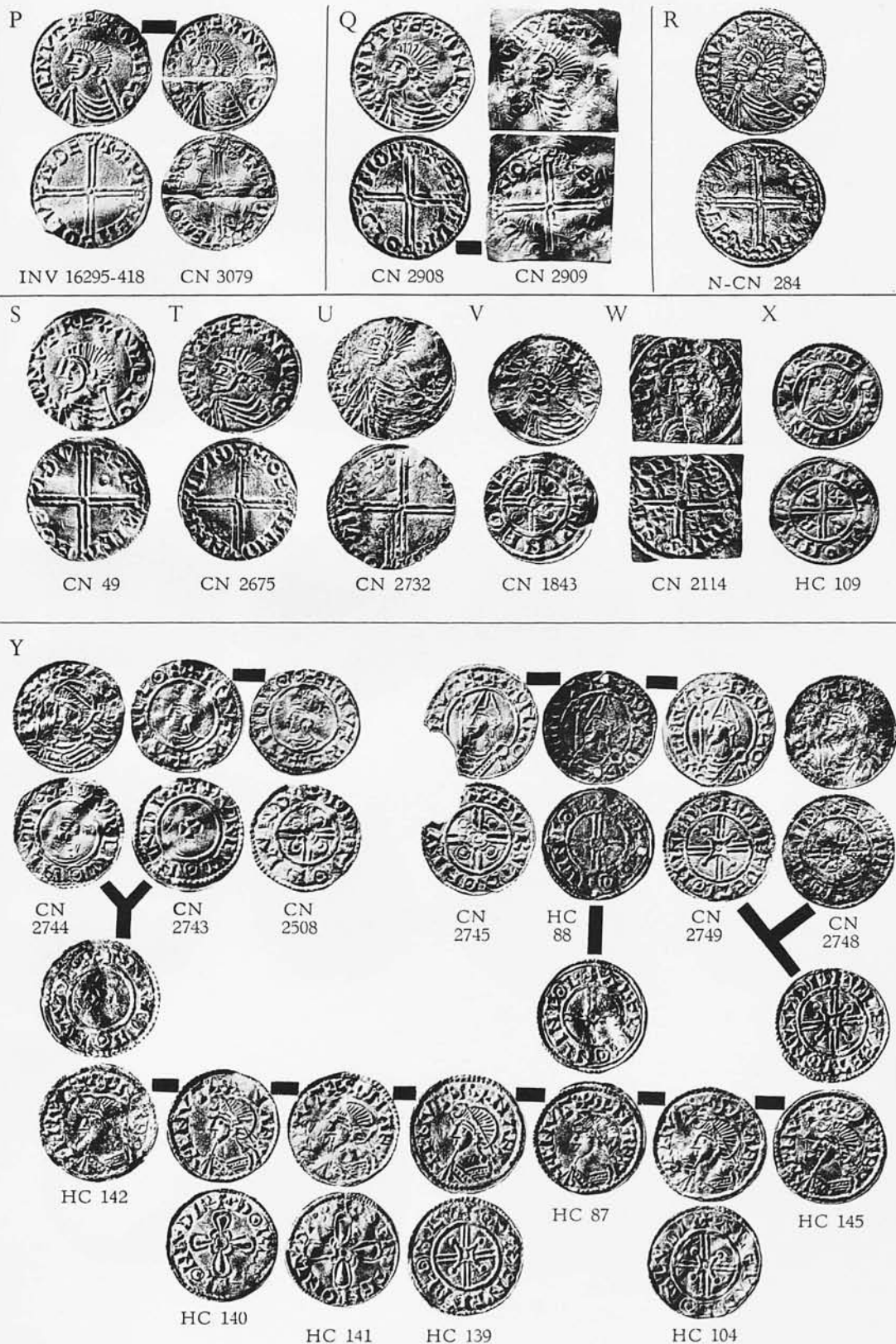
M



O









THE PROBLEM OF THE 'FLEUR-DE-LIS' SCEPTRE ON THE SIGTUNA COINS OF CNUT

By L. O. LAGERQVIST AND R. H. M. DOLLEY

RECENT research, conveniently synthesized by Miss G. van der Meer in *Anglo-Saxon Coins*,¹ has established the sequence of the substantive types of the coinage of Æthelræd II and of Cnut, and has even suggested an absolute chronology. Inasmuch as Scandinavian coin-types of the Viking period are for the most part derived from English prototypes, these new datings have a certain importance for students of the early coinages of Dublin, Denmark, Norway, and Sweden. It should be stressed though, that it is expecting too much to suppose that the date of first issue of an English type gives anything more than a *terminus post quem* for the Scandinavian derivative. Theoretically and in practice the imitation can be as much as a century later than the prototype—at Dublin, for example, one type of Æthelræd II was being imitated well into the twelfth century²—but equally a very short time could and sometimes did elapse between the putting into currency of an Anglo-Saxon coin-type and its imitation. Again, to take an illustration from the Hiberno-Norse series, it can be demonstrated that coins of Æthelræd II were being imitated at Dublin within months of the introduction of the prototype in England.³ The purpose of this note is to suggest that there may even have been an occasion in the reign of Cnut when the design of a new English type was known to a die-engraver in Middle Sweden before coins of the issue concerned had reached the area.

The little group of coins which we propose to discuss are those which purport to be struck at Sigtuna in Uppland for Cnut the Great (sole king in England 1016–35: sole king in Denmark 1018–35: effective rule over Norway finally achieved in 1030: rule over parts of Sweden apparently achieved in the latter part of his reign—but the whole subject is highly controversial and no more than touched on in this paper). This particular coinage, on which Cnut is styled REX SP(eorum), has long been recognized,⁴ though only

¹ Gay van der Meer, 'Some Corrections to and Comments on B. E. Hildebrand's Catalogue of Anglo-Saxon Coins in the Swedish Royal Coin Cabinet', *Anglo-Saxon Coins*, ed. R. H. M. Dolley, London, 1961, pp. 169–87. The theory of a six-year cycle under Æthelræd II and Cnut is set out by R. H. M. D. in the 1954 *N.N.U.M.* paper there cited. That Cnut's third issue began at Michaelmas 1029 is suggested very strongly by the paucity of his Jewel-Cross coins which would be consistent with their introduction not more than a few weeks before his death.

² W. O'Sullivan, *The Earliest Irish Coinage*, Dublin, 1961 *passim*; cf. for the date of the bracteate imitations of Æthelræd II's Long Cross, D. F. Allen, 'The Irish Bracteates', *N.C.* 1942, pp. 71–85 and especially p. 79.

³ The Inch Kenneth hoard from the Hebrides (*Inventory*, 196), for example, has for its latest coin an Intermediate Small Cross/Crux mule (? struck in the summer of 997 cf. R. H. M. Dolley and F. Elmore Jones, 'An Intermediate "Small Cross" Issue of Æthelræd II etc.', *B.N.J.* xxviii, i (1955), pp. 75–87), but also includes at least two Irish coins imitating pennies of Æthelræd's Long Cross type which was introduced at Michaelmas 997 (cf. R. H. M. Dolley, 'Significant New Die-Links in the Hiberno-Norse Coinage of Dublin', *S.N.C.* January, 1962, p. 6).

⁴ H. Hildebrand, *Sveriges mynt under medeltiden*, Stockholm, 1887 (reprint from the wider work *Sveriges medeltid*, vol. i of which was not completed before 1894), p. 18, cf. fig. 358; B. Thordeman, 'Sveriges medeltidsmynt', *Nordisk Kultur*, xxix, Stockholm, 1936, pp. 8–12; H. A.

recently have there come to light the coins reading REX ANGL(orum), and it is very closely linked with the coinage, likewise struck at Sigtuna, of the Swedish king Anund Jacob (c. 1022–c. 1050), a coinage on which, incidentally, Anund's engraver seems almost deliberately to eschew the Swedish title.¹ Cnut and Anund share not one but two mint-masters,² and the most recent research, still not complete, has brought to light a most intricate pattern of die-linking between the two series.³ Significantly, perhaps, for the student of their chronology, no coins of Anund are known with the fleur-de-lis sceptre, and the coins with which we are here concerned are only of Cnut. They are now listed approximately in the order of the English prototypes, and, to bring out their relationship to the coinage as a whole, all Cnut's Sigtuna types are described and not merely those illustrated which are those strictly relevant to the title of this paper.

Group A. Imitations of English coins of Pointed Helmet type.

A *terminus post quem* for these coins is afforded by the introduction of the English prototype, probably at Michaelmas 1023.⁴

(a) Moneyer 'Wulf'.

1. *Obv.* +CNVTR||EXANCL *Rev.* +FVLFMHŠIHTVN

Unique coin in the 1950 Trondheim find.⁵ The English element in this find ended with 9 coins of the Short Cross issue—as opposed to 77 of Pointed Helmet—so that it is tempting to associate this find with the campaign for the mastery of Trondelag that ended in the bloodbath of Stiklestad (29 July 1030).

(b) Blundered.

2. *Obv.* I+LRNEVNT(sic)TIOCON *Rev.* +GHVNIONORITIEVN

Five specimens in the 1950 Trondheim find—no others known?

Group B. Imitations muling obverses imitating English coins of Pointed Helmet type and reverses of Short Cross type.

A presumptive *terminus post quem* for these coins is afforded by the introduction of the English prototype of the reverse probably at Michaelmas 1029, but the question is one discussed in greater detail later in this note.

Parsons, 'Some Coins of Sigtuna inscribed with the names of Æthelræd, Cnut, and Harthacnut', *B.N.J.* xi (1915), pp. 3–19; L. O. Lagerqvist and E. Nathorst-Böös, *Mynt och medaljer*, Stockholm, 1960, pp. 108 and 109, &c.

¹ The Swedish coins of this period have been discussed in some detail by L. O. Lagerqvist in an unpublished *licentiatavhandling* (Stockholm University, 19. iv. 1961), and it is hoped that a comprehensive survey of the Sigtuna coinage in the names of Anund Jacob and of Cnut by the same author will be appearing in a second volume of *Commentationes de Nummis Saeculorum IX–XI in Suecia Repertis*.

² Lagerqvist, *licentiatavhandling*, pp. 69–73. We are most grateful to our friend and colleague Mrs. B. Malmer for bringing to our notice her recent discovery of a coin with obverse legend +CNVTI||REXANCL by the moneyer Sæwine who hitherto was known in this series only for Anund Jacob.

³ Lagerqvist, *op. cit.*, table at p. 86.

⁴ G. van der Meer, *op. cit.*, p. 186—for the Michaelmas *renovatio monetæ* see also R. H. M. Dolley and D. M. Metcalf, 'The Reform of the English Coinage under Eadgar' in the same volume, pp. 136–68, and R. H. M. Dolley, 'The Unpublished 1895 Find of Coins of Edward the Confessor from Harewood', *The Yearbook of the British Association of Numismatic Societies*, no. 7, 1961, pp. 17–25.

⁵ O. A. Digre, 'Myntfunnet fra Dronningensgt. 10, Trondheim', *Det Kgl. Norske Videnskabers Selskab. Årsberetning for 1950*, Trondheim, 1951, pp. 91–96.

(a) Moneyer 'Thormoth'.

3. From the same *obv.* die as 2. *Rev.* +ÐORMOÐONSIH²



[Photo: Nils Lagergren]

FIG. 1.

At least four coins from these dies are in the Royal Coin Cabinet at Stockholm, one in the University Coin Cabinet at Uppsala, one in the National Museum at Helsinki,¹ and one in the Hermitage Museum at Leningrad. Those hoard-provenances that are recorded do not appear relevant to the problems discussed in this note.

Group C. Imitations muling obverses copying—but see below (p. 260)—English coins of Short Cross type and reverses of Pointed Helmet type.

Again a presumptive *terminus post quem* is afforded by the introduction of the English obverse prototype, probably at Michaelmas 1029, but attention is drawn to the fact that these are mules 'the wrong way round'.²

(a) Moneyer 'Thormoth'.

4. *Obv.* +CNVT||REXSF *Rev.* +ÐORMOÐONSIH³



[Photo: Nils Lagergren]

FIG. 2.

¹ T. G. Appelgren, *Förteckning öfver Antellska Myntsamlingens i Helsingfors Svenska Mynt*, i (Helsinki, 1908), no. 20.

² Cf. R. H. M. Dolley, 'The Relevance of Obverse Die-Links to some Problems of the Later Anglo-Saxon Coinage', *Commentationes de Nummis Saeculorum IX-XI in Suecia Repertis*, i (Stockholm, 1961), pp. 156, &c.; and more particularly R. H. M. Dolley, 'The Mythical "Helmet"/"Long Cross" Mules of Æthelræd II', *B.N.J.* xxx. i (1960), pp. 57-60.

³ The same reverse die is also found with an obverse of Anund Jacob of Pointed Helmet type, cf. L. O. Lagerqvist, *licentiatavhandling*, p. 72.

One coin from these dies in the 1950 Trondheim hoard, one in the 1900 hoard from Mannegårda in the parish of Lye on Gotland (deposit *c.* 1100),¹ and another without recorded hoard-provenance but see below p. 259, both these last in the Royal Coin Cabinet at Stockholm.

Group D. Imitations—but again see below (p. 260)—of English coins of Short Cross type.

Once again the presumptive *terminus post quem* is the introduction of the English prototype, probably at Michaelmas 1029.

(a) Moneyer 'Thormoth'.

5. From the same *obv.* die as 4. *Rev.* +ÐO•R.MOÐON•SIH:



[Photo: Nils Lagergren]

FIG. 3.

One coin from these dies, without recorded hoard-provenance but see below p. 259, in the Royal Coin Cabinet at Stockholm; another, from the 1895 Nousis find (deposited *c.* 1039), in the National Museum at Helsinki.²

6. From the same *obv.* die as 4 and 5. *Rev.* +ÐORMOÐONSIHT



[Royal Collection, Copenhagen]

FIG. 4.

¹ SHM Inv. 11300. The hoard also includes one coin of Olof Skötkonung and one of Anund Jacob—'Pointed Helmet' type, moneyer 'Thormoth'—while the English element, *pace* Stenberger, ends with coins as late as William II.

² H. Salmo, 'Suomesta löydetty tanskalaiset 1000-luvun rahat', *Suomen Museo* 1933, pp. 26–29, cf. particularly p. 26, no. 5–7 (= O. Alcenius, 'Fyra Anglosachsisk-Tyska Myntfynd i Finland (1894–7)', *Finska Fornminnesföreningens Tidskrift*, xxi. 2, pp. 34–35, fig. 23). For a valuable discussion of the date of concealment of the Nousis find see C. A. Nordman, *Anglo-Saxon Coins Found in Finland*, Helsinki, 1921, p. 7.

One coin from these dies in the Royal Coin Cabinet at Stockholm from the 1926 hoard from Stora Haglunda in the parish of Alböke on Öland (deposit c. 1090);¹ another, again from the 1895 Nousis find, in the National Museum, Helsinki;² a third, without hoard-provenance, in the Royal Collection of Coins and Medals at Copenhagen.³

Group E. Imitation muling an *Agnus Dei* obverse—legend entirely blundered—and a reverse of Pointed Helmet type.

The strict *terminus post quem* is afforded by the introduction of the Pointed Helmet reverse in England, probably at Michaelmas 1023, but it is a nice problem whether the obverse prototype is the English original—dated perhaps to the summer of 1009⁴—or one of the Lund imitations, some with the name of Harthacnut,⁵ for which a close dating can confidently be expected in the not too distant future.⁶

(a) Moneyer 'Wulf'.

7. *Obv.*    **D+OIIEO+OIEA** From the same *rev.* die as 1.

Unique coin, without hoard-provenance, in the Royal Coin Cabinet at Stockholm.

Group F. Imitation muling a Short Cross⁷ obverse with a Long Cross reverse.

Again the strict *terminus post quem* is afforded by the introduction of the English Short Cross obverse, probably at Michaelmas 1029. The Long Cross type had been discontinued in England more than a quarter of a century earlier,⁸ but partly on account of its high weight had been and was to be extensively imitated in Ireland and in Scandinavia,⁹ and, although the die-link has still to be claimed, we have a suspicion that the reverse die of this coin could represent a survival from the first coinage of Anund Jacob.

¹ SHM *Inv.* 18287. The 140-odd English coins end with Type VII of William I.

² Salmo, *op. cit.*, p. 26, no. 7 (= Alcenius, *op. cit.*, p. 35, fig. 23).

³ The coin was acquired by exchange (from Sweden?) and registered as no. 1010 in the appropriate volume of the manuscript inventory.

⁴ The *Agnus Dei* coins from English mints are the subject of an unpublished monograph by R. H. M. Dolley which it is hoped may be published as a third volume in the *Commentationes*.

⁵ P. Hauberg, *Myntforhold og udmyntninger i Danmark indtil 1146*, Copenhagen, 1900, pl. iv, Hardeknud 4-6.

⁶ In this connexion it may be observed that there is a coin struck at Sigtuna by a moneyer Osbern which is of Short Cross type but bears the name of Harthacnut. It should also be remarked that we are both of us convinced *pace* Hauberg that coins were struck in Scandinavia with the name of Harthacnut before the death of his father, and it may well be significant that Scandinavian coins of Cnut of pure Short Cross type are excessively rare whereas his Quatrefoil and Pointed Helmet coins are not uncommon.

⁷ *Infra*, p. 260.

⁸ G. van der Meer, *op. cit.*, p. 186; and for the association of the Helmet issue with the opening of the Salisbury mint, R. H. M. Dolley, 'The Sack of Wilton in 1003 and the Chronology of the "Long Cross" and "Helmet" Types of Æthelræd II', *N.N.U.M.*, May 1954, pp. 152-6.

⁹ V. J. Butler, 'The Metrology of the Late Anglo-Saxon Penny: The Reigns of Æthelræd II and Cnut' in the same volume as the papers by G. van der Meer and by R. H. M. Dolley and D. M. Metcalf already cited, pp. 195-214, and especially pp. 202-4 and 214.

(a) Moneyer 'Thormoth'.

8. Apparently from the same *obv.* die *Rev.* +D||OR||MO||ÐΣ
as 4, 5, and 6.

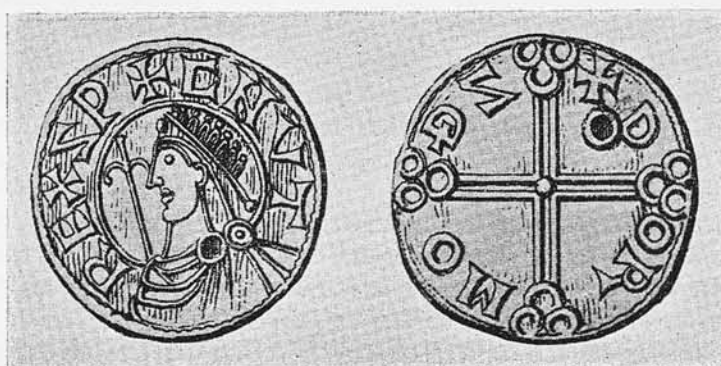


FIG. 5.

The coin is known today only from an engraving¹ but there is no reason whatever to doubt that the piece existed.

Group G. Imitation muling a Pointed Helmet reverse with a problematical obverse—it is not clear if the bust is diademed or crowned.

The unique specimen known to us is mutilated, and it is impossible to decide if the obverse is a free adaptation with inner *circle* of a Quatrefoil obverse or a less free version of a Last Small Cross obverse with the bust breaking the legend, in which case it could be argued that it is really a 'transitional' obverse between Pointed Helmet and Short Cross, retaining the inner circle from the former and anticipating the bare-headed portrait of the latter.

(a) Moneyer 'Sæwine'.

9. *Obv.* +CNVTI||REXAL○ *Rev.* +SEFINEONHTW

Unique coin in the Royal Coin Cabinet at Stockholm, possibly from the (?) 1863 Lilla Klintegårda find from the parish of Väske on Gotland (deposit *c.* 1043).²

It should be observed that 'Sæwine' is known for Anund Jacob from a very similar reverse die.³ The English numismatist must remark that a Sæwine had been a well-known Wilton moneyer *cf.* Hild. Ethelred 4008–19, and that one coin of Anund Jacob, with reverse legend +CASTRAONPIT.VN may preserve traces of the Wilton mint-signature.⁴

To the attentive reader it will have become clear that the typological evidence is virtually decisive that the Sigtuna coinage in the name of Cnut

¹ B. de Köhne, 'Ueber die im russischen Reiche gefundenen abendländischen Münzen des X., XI. und XII-en Jahrhunderts (Dritter Artikel)', *Mémoires de la Société impériale d'archéologie*, iv, St. Petersburg, 1850, pp. 229–30. The relevant illustrations had appeared in vol. iii (1849), pl. xvii and the coin in question will be discussed by Dr. N. L. Rasmusson in the next volume of *Commentationes*.

² SHM *Inv.* 5804 and see *supra*, p. 253, n. 2. Stenberger, *S.G.* 583, is in error in claiming that the English element in the hoard ends with Quatrefoil of Cnut as there are present *Pacx* coins of Edward the Confessor and German coins of the same period. This is the coin brought to our notice by Mrs. Brita Malmer.

³ H. Hildebrand, *op. cit.*, p. 18, no. 3 (not illustrated).

⁴ *Ibid.*, p. 18 (not illustrated).

cannot be as early as the months immediately following the battle of Helgeå ('the Holy River') in Skåne which is now usually dated to the year 1026.¹ Imitations cannot antedate their prototypes, and the Short Cross type of Cnut cannot well have been in issue much before 1030. Incidentally there is still no real agreement on the extent to which this battle could be considered a victory for any of the protagonists, Cnut on the one hand, and Olaf Haraldsson and Anund Jacob on the other.² In fairness to Parsons it must be remarked that he sensed that Cnut's Sigtuna coinage could not be so early, but we would emphasize that we cannot accept his reconstruction of the historical background.³

For our present purpose the critical coins are nos. 4, 5, 6, and 8 which are from one obverse die with the legend +CNVTREXSP and the fleur-de-lis sceptre which on English coins is first found on Short Cross coins probably introduced at Michaelmas 1029. The suggestion of some Swedish scholars that the ethnic is a coincidental blundering of the normal English title seems to us—as it has already to Dr. N. L. Rasmusson⁴—a perversion of numismatic methodology. Not only is there no English coin with an ethnic other than the English but the legend is literate and explicable, and finds an echo in one of the few contemporary documents that have been preserved, the letter of Cnut to his English subjects which was composed it would seem soon after his visit to Rome in 1027.⁵ In this letter the author is styled 'rex totius Anglie et Denemarcie et Norreganorum et partis Suanorum'.⁶

Of this all-critical obverse it should be observed (a) that there is the inner circle proper to Pointed Helmet but not to Short Cross, and (b) that the treatment of the hair exhibits important minor points of difference from that found on normal English coins of Short Cross type. In other words it cannot be said that the obverse is a copy of an English penny. Rather it could be thought of as an inspired anticipation. Confirmation of this line of argument is provided not by one but by two hoards. Already we have cited the 1950 hoard from Trondheim, the source of no fewer than 7 out of the 19 Sigtuna coins in Cnut's name known today, which it is hard to suppose not to have been concealed in the summer of 1030 and which contains six coins of pure Pointed Helmet type—all the known specimens!—and only one of the 'mules'. One recalls once again Mr. C. E. Blunt's remarks in another context⁷—five of

¹ C. Weibull, *Sverige och dess Nordiska Grannmakter under den tidigare medeltiden*, Lund, 1921, pp. 154–5. If the apparent testimony of a Cotton MS. (Dom. A VIII, fol. 67a) is to be believed, Helgeå was fought as early as 1025.

² Cf. also F. M. Stenton, *Anglo-Saxon England*, 2nd edn., Oxford, 1947, p. 397, and D. Whitelock, *English Historical Documents*, i, London, 1955, p. 230, 309, and 310.

³ H. A. Parsons, op. cit., *passim*, but especially pp. 10–16. The numismatist will notice that he had assembled only part of the material then known, and did not claim the die-link which he illustrated (p. 8, figs. 6 and 7).

⁴ N. L. Rasmusson, *Sveriges mynthistoria*, 3rd edn., Stockholm, 1961, p. 13.

⁵ Stenton, op. cit., p. 401; Whitelock, op. cit., pp. 231, &c.

⁶ The historian, too, will wish to consider the document in the light of other styles employed by the rulers of this period (cf. O. Moberg, *Olof Haraldsson, Knut den Store och Sverige*, Lund, 1941, pp. 148–89).

⁷ 'The inference seems inescapable that all these coins that are so strongly die-linked can only recently have left their places of issue' [concerning certain London coins in the Crondall hoard of c. 680 which Dr. C. H. V. Sutherland had sought to attribute to a bishop of London expelled from his see in 617 and who died in 624]. *B.N.J.* xxv, iii (1949), pp. 343–5.

the coins are die-duplicates—and it may even be claimed that the Trondheim hoard vindicates the suggestion that the relevant *renovatio monetae* in England can be dated to Michaelmas 1029, and especially since the association of the hoard with the eventful summer of 1030 is entirely consistent with the date of the latest German coins.¹ Even more suggestive for the position of what we may call the 'transitional' Short Cross obverse of Sigtuna is the 1846 hoard from Undroms in the parish of Boteå in Ångermanland.² English readers should perhaps be reminded that Ångermanland lies a considerable distance to the north even of Uppland, and in the eleventh century came principally within the Swedish and not the Danish or Norwegian spheres of influence. This hoard contained some 570 English coins, no fewer than 196 of Pointed Helmet type, but there was not one single penny of Short Cross type. Yet there were in it two coins of 'Thormoth' of Sigtuna struck in the name of Cnut with the Swedish title and the fleur-de-lis sceptre. Hildebrand's notes do not, unfortunately, specify the reverse type or types, but the presumption must be that the coins concerned are the Stockholm specimens of nos. 4 and 5, i.e. a 'transitional' Short Cross/Pointed Helmet mule and a true Short Cross reverse coupled with the same 'transitional' obverse.

The Sigtuna coins are imitative, and essentially there are two classes of imitation. Either a prototype is laid down for the engraver by some higher authority, or the engraver himself selects his prototype. In the latter case he will normally choose to imitate a type that is locally acceptable, in other words a type that already is circulating freely or that has a special appeal.³ Had Short Cross coins of Cnut from England reached Sigtuna in sufficient quantity to be the subject of spontaneous imitation, it seems inconceivable that none should have been present in the Undroms find. We must in consequence have recourse to the former hypothesis, namely that the choice of the type was more or less officially inspired—it would be asking too much of coincidence that the mint-master at Sigtuna and the designer of the Short Cross coinage for the whole of England independently hit upon a coin-type which displayed the same innovations, i.e. the fleur-de-lis sceptre, hitherto unknown on the coins of northern Europe, and the simple but effective reverse type. It should here be remarked that Hauberg, pl. ii. 14, demonstrably belongs after Cnut's death, while Miss G. van der Meer has pointed out to us that Hauberg, pl. ii 16, is from the same obverse die as Hild. Cnut 2123, a Scandinavian imitation with a reverse copied from an English coin of 1040–2. The fact, too, that the obverse die of the Sigtuna coins demonstrably is not copied from English coins favours the hypothesis that it was cut at a time when English coins of Short Cross type had not yet been imported. The survival of the inner circle, too, may seem to suggest that knowledge of the new issue

¹ Information in letters from Prof. Dr. P. Berghaus of Münster.

² SHM *Inv.* 1318.

³ Coins of the abortive *Agnus Dei* issue, for example, cannot have reached Scandinavia in substantial quantity, and it is suggested that the dozen examples of which there is a record include several pairs of die-duplicates (cf. the forthcoming monograph *supra*, p. 256, n. 4). That these coins were so widely imitated can be explained not only by the religious associations of the highly unusual and attractive types but by the fact that they were struck on the unusually high weight-standard of 27 grains. In contrast Cnut's Short Cross issue was not struck on a standard superior to that of its comparatively 'light' precursor (cf. the paper by Miss Butler, *supra*, p. 256, n. 9) and the design was considerably less novel.

had been conveyed to Sigtuna—or less plausibly 'leaked'—by word of mouth or by written description and not through a pictorial medium such as a pattern-piece or a drawing.¹

In this connexion it may be observed that this is by no means the first occasion on which a type proper to the English coinage appears to have been anticipated in Scandinavia to the extent that local imitations were already in currency before the arrival of the English counterparts. There are the most interesting finds made in 1849 at Lille Mickelgårds in the parish of Väske on Gotland, and in 1914 and 1915 at Bjärby in the parish of Etelhem on the same island.² The first contained English coins running down to and including Helmet of Æthelræd II and no English coin of Cnut, but a coin of Cnut with the Danish title of Last Small Cross type. The latter contained ten Anglo-Saxon pennies running down to and including Last Small Cross, no English coins of Cnut, but a Quatrefoil/Last Small Cross mule of Cnut struck at Lund. While on this subject, too, we would remark that we are far from happy concerning Hauberg's interpretation of the absence of coins of Harald Sveinsson (king in Denmark 1014–18) as indicative of a post-1018 date for Cnut's earliest Danish coins.³

From what has been said it will be clear that we are pretty well satisfied that the mint-engraver at Sigtuna must have had advance knowledge of the coin-type introduced in England at Michaelmas 1029. As is well known, Cnut was not in a position to impose on the Danish kingdom the strict uniformity of coinage that he found in England and was shrewd enough to preserve, but it must have been an ideal, and one suspects that a proportion at least of the Danish imitations of Quatrefoil and Pointed Helmet, and especially of those which exhibit comparatively competent workmanship, were struck at the behest of the royal authority. We do not wish in this paper to discuss the occasion and historical context of the coinage of Cnut at Sigtuna, but one must stress the distinction between any *ad hoc* authority which he might exercise in Middle Sweden and that enjoyed by the kings in Denmark where royal power was subject to precedent and to that extent might be more circumscribed.

As already remarked, the fleur-de-lis sceptre is something quite new in the coinage of northern Europe, and this despite the fact that a sceptre had appeared intermittently on English coins for something like fifty years.⁴ During that period there had been plenty of opportunity for an engraver to have hit upon the fleur-de-lis if novelty had been his objective, but the normal version had been a simple trefoil with one solitary and short-lived excursion into a cross *pattée*.⁵ In Germany at this period the sceptre normally occurring

¹ For the execution of the obverse die in question it would have been enough for the engraver to have been informed (a) that the profile portrait would revert to a diademed bust, and (b) that the sceptre was to be represented by a fleur-de-lis instead of a trefoil of pellets. As regards the reverse, it would be necessary only to inform him that the type was that of the previous issue with the 'bosses' omitted.

² SHM *Inv.* 1541 (= SG 580) and 15373 (= SG 142). See also L. O. Lagerqvist 'Dansk eller Engelskt? . . .', *N.N.U.M.* January, 1962, pp. 4–6.

³ Hauberg, *op. cit.*, p. 45.

⁴ R. H. M. Dolley, 'Three Late Anglo-Saxon Notes', *B.N.J.* xxviii, i (1955), pp. 88–105 illustrates the sceptre's first appearance on Kentish coins of First Small Cross type (p. 89).

⁵ For the trefoil sceptre: First Hand, Second Hand, early Benediction Hand, Crux and Pointed

in representations of the emperor resembles one traditional sceptre of Rome and of Byzantium, the sceptre tipped by an eagle, though a fleur-de-lis sceptre is sometimes found as well as a variety of staffs ending in knobs, trefoils, and crosses.¹ Furthermore it is perfectly clear that the engraver of Cnut's Short Cross dies was not seeking innovation for innovation's sake—of all Cnut's English coin-types Short Cross was the most traditional and the least revolutionary, and we would particularly stress the reversion to the diademed portrait.

In March 1027 Cnut had done something which no English king had ever done before. He had attended the Roman coronation of a German Emperor, Conrad II.² At the previous Roman coronation in 1014 the Emperor Henry II had received from the hands of the Pope an apparent novelty, a *globus cruciger*,³ and there is perhaps a presumption that precedent was followed in 1027. However this may be, we know that Cnut himself was not dissatisfied with the status accorded him by the Pope nor with the gifts that he received.⁴ A tentative suggestion we would like to make is that Cnut's quite exceptional sovereignty in northern Europe was recognized on this occasion by the grant of a sub-imperial sceptre,⁵ and that this was of fleur-de-lis form. We are only too aware that this hypothesis is incapable of proof, but we do feel that it would explain the sudden introduction of an entirely new form of sceptre in a coin-type which in all other respects was traditional—to the point of being colourless. If, too, we suppose that the new form was deliberate and reflected consciously some recent access of honour and prestige, it is perhaps more probable that its employment on the coins of Sigtuna was inspired by the royal authority rather than that it was adopted there by die-cutters who had chanced to hear that it was to be a feature of the new English coin-type. In either case, however, our main argument is unaffected. The type of the English penny of Cnut's third issue would seem to have been known at Sigtuna and deemed apt for imitation *before* English coins of that recoinage can have arrived in Middle Sweden in any quantity.⁶

Helmet, and also the odd die in Intermediate Small Cross and Transitional Crux, Last Small Cross and Quatrefoil. For a cross *pattée* sceptre: late Benediction Hand. For an anomalous sceptre of no clear form: the odd die in Small Crux.

¹ P. E. Schramm, *Die deutschen Kaiser und Könige in Bildern ihrer Zeit*, vol. i, Leipzig-Berlin, 1928, pl. 62, 67, 68, 71b, 73, 74b, 75, 76a, 78, 79, 80, 81, 87, 94, 99a.

² Stenton, *op. cit.*, pp. 401, &c.

³ E. Twining, *A History of the Crown Jewels of Europe*, London, 1960, p. 298; cf. P. E. Schramm, *Sphaira, Globus, Reichsapfel*, &c., Stuttgart, 1958, pp. 62, &c.

⁴ Stenton, *op. cit.*, p. 402; cf. Whitelock, *op. cit.*, p. 417.

⁵ It is perhaps suggestive that a fleur-de-lis sceptre signified unusual regal honour, that it should be borne by German emperors on those seal-representations where the full imperial sceptre with bird does not appear (e.g. Schramm, pl. 62b in the first of his works cited.)

⁶ We feel we should stress that we believe the main thesis of this note—that the English change of type was anticipated at Sigtuna before the arrival of English coins of the new issue—would not be affected even if one day another date should be established for Cnut's third *renovatio monetæ*. On the other hand we must admit that in our opinion the *nexus* which seems almost inescapable between the 1950 Trondheim hoard and the battle of Stiklestad in itself suggests very strongly that the hypothesis is correct which would associate this third *renovatio monetæ* with Michaelmas 1029.

THE COINAGE OF HENRY VII

By W. J. W. POTTER AND E. J. WINSTANLEY

INTRODUCTION

MOST of the English hammered coins of the late medieval period have been submitted to exhaustive study during the past fifty years, but the coins of Henry VII have presented so many baffling and seemingly insoluble problems that not even the labours of G. C. Brooke,¹ L. A. Lawrence,² and R. Carlyon-Britton³ have produced the answers to anything like all the questions. It is our hope, after coming together to pool the results of a good many years of study, that in offering this paper to readers of this *Journal* we may be found to have provided a reasonably complete picture of one of the most difficult and fascinating pages of English coin history.

There is no doubt that the larger silver coins of Henry VII, the shillings, groats, and halves, are among the most interesting of the hammered series, not only from a purely numismatic viewpoint, but also artistically and historically. As well as presenting the many problems of sequence, dates, and styles mentioned, they illustrate in a most striking way the evolution of the royal bust from the traditional full-faced aspect with stiff curls and open crown, to the modern conception of a true portrait, at first full-faced like the old, but finally in profile, copying the work of the Renaissance on the Continent.

The ordinary gold coin of the reign, the angel, does not present the variety or the artistic interest of the silver, though the designs of St. Michael and the dragon and the ship on the reverse were modified during the reign. On the other hand the splendid series of sovereigns showing the king robed and crowned, seated facing on the throne, are of the greatest artistic and numismatic importance, for they show probably the peak of Gothic medallic art, and then the picture gradually transformed and revitalized by the new ideas of the Renaissance.

For our classification we have retained and amplified Brooke's five-type system based on the style of crown on the groats which could hardly be bettered for the silver. It is not strictly applicable to the gold, but for convenience' sake the type numbers have been used as far as is practicable by reference to the mint-marks, lettering, and stops.

The groat being the most important coin it has received prior and separate treatment under each of Brooke's types, so that the first four chapters will be found to deal solely with this denomination omitting only the profiles. Part I is completed with a chapter on the full-face half-groats. Part II commences with a comprehensive chapter covering all the profile coins. The gold coins, sovereigns, ryals, angels, and angelets are dealt with in Chapter VII, followed by one on the small silver, pennies, halfpennies, and farthings. The final chapter discusses the questions of dating the issues and also describes the great variety of privy marks which are found on these coins.

¹ *English Coins* (1931).

² *The Coinage of Henry VII* (N.C. 4/xviii, 1919).

³ *The Last Coinage of Henry VII* (B.N.J. xviii, 1925-6). On Some Early Silver Coins of Henry VII (B.N.J. xxiv, 1941-2).

A summary of the classification adopted for the groats is given in the list below, together with the mint-marks found on each type by which it is possible to relate the earlier angels and angelets. For the greyhound's head and crosslet marks on the gold, however, a different procedure is required which will be found described in the text.

A list is also given of the eight types of lettering encountered. These, with their several sub-types, are fully described and illustrated in the text. As to the reverse cross-ends found on the groats and on some of the halves, these are valuable for identification purposes and illustrations will be found of the eleven forms noted. Dr. Lawrence illustrated eight in his 'Coinage of Henry VII', and Mr. Carlyon-Britton added one more in 'The Last Coinage of Henry VII', but there are, in fact, eleven, with minor forms of one or two which are duly mentioned in the text.

Most of the half-groats and smaller silver as well as the sovereigns have marks outside the normal range, but it is still possible to give them type numbers from the classification as will be explained in the relevant chapters.

CLASSIFICATION

General Classification:

- I. The open crown.
- II. The crown with two plain arches.
- III. The crowns with jewelled arches.
- IIIA. Two jewelled arches, bust 1—as types I and II.
- IIIB. Two jewelled arches, bust 2—hair curled in at ends.
- IIIC. Outer arch only jewelled, bust 3—realistic hair, pupils to eyes.
- IV. The single-arched crowns, bust 3.
- IVA. Single bar with 4 crockets as jewels.
- IVB. Double bar with 6 uprights as jewels.
- V. The profile type.

Type	Mint-marks	Letters	Cross-ends
I	Halved sun and rose, halved lis and rose, lis on rose, lis on sun and rose. Lis, cross fitchy, rose	A	1
II	No mint-mark	A	1
	Heraldic cinquefoil	A	1, 2
IIIA	Heraldic cinquefoil	B	3
IIIB	Escallop	B, C, D, E	3, 4
	Pansy	E	4, 5
IIIC	Pansy	E	5, 6, 7
	Leopard's head crowned	E	7
	Lis-issuant-from-rose	E	7
	Anchor	E	7, 8
	Greyhound's head no. 1	E, F	8, 9
	Greyhound's head no. 2	F	9
	Cross-crosslet	G	10
IVA, B	Greyhound's head no. 2	G	9, 10
	Cross-crosslet	G	10
V	Cross-crosslet	G	11
	Pheon	G	11

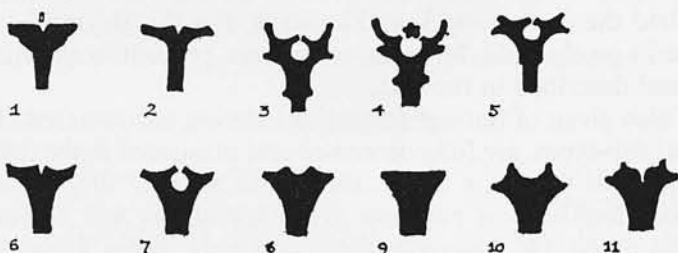
CROSS ENDS

FIG. 1.

PART I

CHAPTER I. *Type I: The Open-Crown Groats*

The first groats of the new reign continued unchanged the types of Richard III, consisting of those bearing the old conventional full-face bust with wide, stiffly curled hair and open crown. The surviving coins of this type, however, are divisible into two distinct groups: those with compound mint-marks, saltire stops, and a bust like that of Richard III, which should be the earlier, and those with single mint-marks, quaterfoils or saltires by the neck, and varied stops. These latter often have a bust of somewhat different style, and are linked by muling with subsequent types and so, it is reasonable to assume, are later in date.

A. *The compound marks.* There has always been a considerable divergence of opinion as to what these mint-marks really are. No denomination of the first coinage is common and many of the surviving groats are in poor state, clipped or with the mint-marks barely legible from wear. It is not surprising, therefore, that all the marks were originally called simply 'lis on rose'. In Walters's 1913 sale, however, three groats were described as having the mark 'lis over the united sun and rose', and in Lawrence's 'Coinage of Henry VII' (N.C. 1919), the rose and lis dimidiate and the lis over sun and rose are recognized as variants of the original. Brooke, however, in his *English Coins* published in 1931, reduced the marks to two again: lis over sun and rose and lis-rose dimidiate, and the B.M. collection is classified on this basis. Subsequently, R. Carlyon-Britton published the description of a groat with Richard III's sun and rose dimidiate mark on the reverse (B.N.J. xxiv).

Over seventy groats have been examined either in original or cast form, which must represent a good proportion of the surviving specimens, and the following is a resumé of the position regarding the mint-marks used:

1. The marks used were: halved sun and rose, halved lis and rose, lis on rose, and lis on sun and rose.
2. The halved sun and rose is known on only three reverses, which may or may not be from Richard III dies. The halved lis and rose mark is found on about one-third of the obverses including those with halved sun and rose reverses. The lis on rose and lis on sun and rose are known on about one-third and one-quarter respectively of the obverses.

3. The evidence as to the order of use of these marks is conflicting. They were probably used concurrently during part of the period and certainly the halved lis and rose appears to have been used throughout if only spasmodically.

The halved sun and rose was, we know, the Yorkist emblem combining the sun of Towton with the white rose of York, and as such appeared on the later coins of Edward IV and on those of Edward V and Richard III and it is surprising to find it on the coins of the Lancastrian victor of Bosworth. The halved lis and rose was a Lancastrian answer to the Yorkist symbol, the lis being the Lancastrian emblem derived from Henry VI, who might have been King of France, and the rose the red rose of Lancaster. On the other hand the mark might have been intended to symbolize the uniting of the two houses by Henry's marriage with Elizabeth of York on 18 January 1486. The lis on sun and rose, which was probably not an early mark, seems more likely to have represented Henry's victory over the Yorkists and could well have been suggested by his success in crushing the rebellion of Lambert Simnel in June 1487.

Taking the marks in order of their mention above, the three reverses of the halved sun and rose are from two dies and, as already mentioned, the obverses have the halved lis and rose mark (Pl. XIX, 1). As to whether these reverses are from Richard III dies, it has not been possible to find any die-link, but the balance of probability is that they are, in view of the fact that the mark is not found on obverse dies, which of course would bear Henry's name. On the other hand, as will presently appear, there were undoubted Henry VII new angel obverse dies with the halved sun and rose mark.

A particular point is the form of the sun on these dies, which has four rays. The great majority of Richard III dies have a six-rayed sun in the mint-mark, a fact which led R. Carlyon-Britton in his 'Some Early Silver Coins of Henry VII' (*B.N.J.* xxiv)¹ to conclude that these were new dies of Henry VII. However, in 'Angels and Groats of Richard III' (E. J. W. in *B.N.J.* xxiv, 1943-4), it has been shown that this four-rayed sun does occur on rare late groats.

The second mark mentioned, the halved lis and rose, is found on the obverses of 25 of 71 groats specifically noted, of which, however, only 11 are true coins and further no mule with this mark on the reverse was noted. The shortage of reverses of this mark may be accidental but is certainly curious.

The remaining 46 obverses and 53 of the remaining 57 reverses, including the 14 with halved lis and rose obverses, have versions of the lis on rose mark consisting in each case of a lis of varying size and shape, and above and to the right, rose petals and/or sun's rays in different proportions and relative positions. This lis was not stamped over a previously applied mint-mark. In every case it looks as if the punch was cut as a whole and applied in the normal way, and more than one die has been noted on which the mint-mark has been struck from the same punch. Furthermore, it is possible to list many of the

¹ In this article Carlyon-Britton illustrates the reverse which he then thought to be unique (Pl. 1). This actually has a halved lis and rose obverse and not a lis on rose as stated, and is the first of the three coins known. Carlyon-Britton's no. 8 (Pl. 4), wrongly described as having a rose reverse, is the second specimen, while the companion to this (no. 9 in the list, not illustrated), is the third coin. Two obverse dies only are concerned in these three coins and the above remarks illustrate well the difficulties attending identification of marks on these coins.

punches under definite descriptions, as, in spite of the fact that more than one punch was used for some of the forms, the component parts on these duplicate punches are always recognizably of similar proportions and positions.

Here is a list of the chief forms noted:

1. Lis on rose no. 1: Fat lis and three rose petals to right. (On obverses and reverses.) (Pl. XIX, 2)
2. Lis on rose no. 2: Smaller lis with three rose petals to right, bottom one split into two and possibly representing sun's rays. (Always on obverses with rose on breast, and on reverses.) (Pl. XIX, 3)
3. Lis on rose no. 3: Lis as 2 with fragment of ray (?) on central petal and three rose petals to right. (On obverses always with nothing on breast, and reverses.) (Pl. XIX, 4)
4. Lis on rose no. 4: Lis as 2 and rose having three widely scattered petals. (On two reverses only.)
5. Lis on sun and rose no. 1: Small lis with sun's rays at top left to half right, and one and a half rose petals. (On obverses and rarely on reverses.)
6. Lis on sun and rose no. 2: Small lis with sun's rays only to right. (On reverses only with No. 1 obverses.)

The distribution of these forms of mark and of the other two already mentioned is as follows:

<i>Obverses</i>	<i>Reverses</i>	
1. Halved lis and rose (6 dies)	1. Halved sun and rose . . . 3 2. Halved lis and rose . . . 11 3. Lis on rose no. 1 . . . 1 4. Lis on rose no. 3 . . . 6 5. Lis on sun and rose no. 2 . . . 3 Indistinct . . . 3 — 27	
2. Lis on rose no. 1 (2 dies, one with one without fleur)	1. Lis on rose no. 1 . . . 3	
3. Lis on rose no. 2 (3 dies, all with rose on breast)	1. Lis on rose no. 1 . . . 4 2. Lis on rose no. 2 . . . 4 Indistinct . . . 7	
4. Lis on rose no. 3 (4 dies, all with nothing on breast)	1. Lis on rose no. 3 . . . 1 2. No mint-mark—lis or cross- fitchy dies . . . 4 Indistinct . . . 3 — 26	
5. Lis on sun and rose no. 1 (3 dies, all with fleur on breast)	1. Lis on sun and rose no. 1 . . . 1 2. Lis on sun and rose no. 2 . . . 9 3. Lis on rose no. 1 . . . 3 4. Lis on rose no. 2 . . . 1 5. Lis on rose no. 4 . . . 2 Indistinct . . . 2 — 18	

6. Rose (single mark)	Lis on sun and rose no. 2 .	1
(3 dies, 2 with quatrefoils, one	Indistinct . . .	4
with saltires by neck)	—	5
		<hr/> 76

It would seem that the forms listed above were intended to be separate marks, as the majority are distinguished on the obverse by an additional difference, namely, the breast ornament. It is the more curious, therefore, that there should be such a mixture of reverses to be found with many of them. The difficulty of placing them in order of use is well shown by the halved lis and rose mark. The fact that it is found with Richard's halved sun and rose would seem to make it the earliest issue and yet it is also found with all the other marks including the lis on rose no. 3 which is the obverse mark of the four groats with 'no-mint-mark' reverses. These reverses are linked with the later single marks, as will shortly be explained.

Lettering A

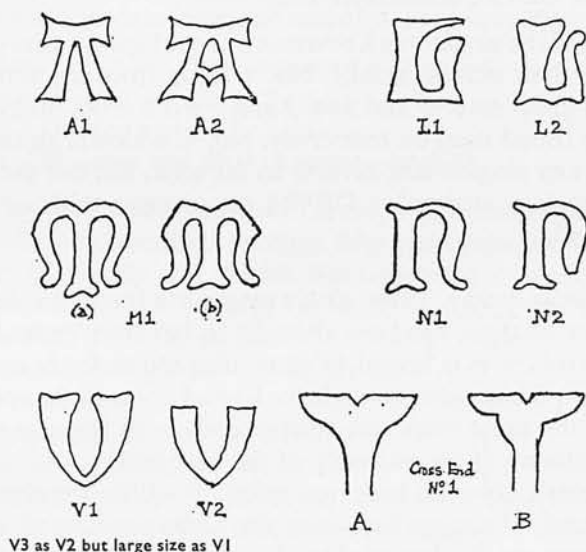


FIG. 2.

In spite of the difficulty in deciding the order of the marks owing to the number of different forms of reverse found with them, a strong confirmation that the halved lis and rose mark was the first to appear is to be found on the reverses of this mark. They all have the original form of cross-end no. 1 as found on the groats of Richard III (A, Fig. 2), while the later lis on rose and lis on sun and rose reverses show a modified form with the two arms of differing shape (B, Fig. 2). This is the form found on all the single-mark reverses.

The lettering on these groats shows little variation, with the exception perhaps of the V's on the reverses which are found of three forms, V1, V2, and V3 (Fig. 2), and occasionally the N's in LONDON. The pattern of use of these letters, however, is obscure, as both V1 and V2 have been found on reverses of the halved lis and rose mark, and all three forms on the other

reverses. The reverse stopping is of a standard form which is preserved unchanged throughout, with none of the varieties which are such a feature of the single-mark groats and those of type II. It consists of double saltires after DEVM and a saltire and abbreviation mark after ADIVTORE, the only variant being the presence or absence of saltires after POSVI. There are no stops in the inner circles, and the A of ADIVTORE, which might be included in the picture as being of probable privy significance at this time, is always unbarred.

The four no-mint-mark reverses found with obverses of lis on rose no. 3 all differ from the standard arrangement given above, having barred A's in ADIVTORE and stops in the inner circle, both of which features are characteristic of the single-mark groats, which usually also have the mint-mark on the obverse only. The stops on these reverses are as follows:

1. Quatrefoils after DEVM and TAS, lis after DEVM (BM). (Pl. XIX, 4)
2. Saltires before and after POSVI, quatrefoil after TAS, lis after LON.
3. Quatrefoils before and after POSVI and after TAS, lis after LON. (Pl. XIX, 5)
4. Quatrefoil after DEVM, saltire after TAS.

A comparison of the single-mark reverses has enabled the first three of these to be allotted to their correct marks, No. 1 being from the same die as the B.M. lis-marked groat reverse and nos. 2 and 3 from cross-fitchy reverse dies which have been found used on true coins. No. 4, which is an unknown stop arrangement on any single-mark reverse so far seen, has not yet been identified; where there is a stop after DEVM on reverses without the lis it is invariably a trefoil.

B. *The single mint-marks.* Three single marks are found on the groats. Up till now the order of these has been thought to be: rose, cross-fitchy, lis. In the pages which follow it is hoped to show that the order is more correctly stated as: lis, cross-fitchy, rose, though the lis and cross-fitchy coins probably appeared about the same time and concurrently with the end of the lis on rose and the beginning of the currency of the rose mark.

These single-mark coins all have quatrefoils or saltires by the neck and so may be immediately distinguished from the compound mark groats. They also all have fleurs on the breast, but the obverse stops differ. The cross-fitchy coins have saltires as on the compound-mark groats, the lis coins have pellets, and the rose-marked coins have the later trefoils. The reverse stopping shows great variety, including the use of lis, trefoils, and saltires in both inner and outer legends.

There are only two specimens known of the lis-marked groat, both from the same obverse die. One is in the B.M. collection (Pl. XIX, 7), while the other was in the Lockett sale under no. 1700, though not illustrated. This obverse presents two unusual features: the king's name is spelt HENRCVS with DEI in full, and the stops, as already noted, are pellets. The two reverses, without mint-mark, are from similar but not identical dies, with saltires after DEVM and TAS and lis after DON.

The coin in the B.M. collection also ticketed as mint-mark lis, having a very badly struck obverse, has quatrefoils by the bust, but the king's name is spelt

normally as HENRIC, and it has trefoil stops, and therefore it can only be of the rose mark. However, the reverse is of cross-fitchy type II, and the coin is the only rose/cross-fitchy mule known.

There are many more cross-fitchy groats in existence than the lis; twenty-two have, in fact, been noted, but only three obverse dies were used for them all. These obverses resemble that of the lis coins in having the king's name abnormally spelt, this time in full: HENRICVS.DEI, but the stops are saltires, except for a pellet after REX on one of the dies. They also have quatrefoils by the neck, and the busts closely resemble the lis bust in having a rounded boyish face with round eyes. The three dies can be recognized by the legend ending, viz. 1—FRA (Pl. XIX, 8), 2—FR^z (Pl. XIX, 9), and 3—also FRA but with the right-hand leg of the A struck over the vertical limb of the cross, and pellet after REX (Pl. XIX, 10).

The reverses, like those of the lis coins, have no mint-mark, and may be divided into three classes:

- I. Lis after LON, saltires after POSVI and TAS (4 dies).
- II. Lis after POSVI and ADIVTORE (2 dies).
- III. Trefoils and saltires in inner and outer legends (many dies).

They are found with the three obverses as follows:

- I. With die 1 (1 coin) and die 2 (3 coins).
- II. With die 1 (1 coin) and die 2 (3 coins).
- III. With die 2 (6 coins) and die 3 (8 coins)—total 22.

The surviving rose groats are considerably more numerous than those of either of the other two marks. Perhaps fifty specimens were examined and a large number of obverse and reverse dies were used to produce them. There is no longer any unusual feature to be found on them. On the obverse the king's name is HENRIC.DI as on the normal groats of the reign. Quatrefoils are still occasionally found beside the neck, but these small crosses are usually in the saltire position. The obverse stops used are normally trefoils, but there is one special die known which has star stops.

The reverses are of the type which forms the third class of cross-fitchy reverse, i.e. the stops are combinations of saltires or quatrefoils and trefoils, and no lis is used. Usually, there is no mark on these reverses but a few groats are known with the mint-mark on both sides (Pl. XIX, 13). The reverses with mint-mark form a class of their own, as although the six specimens noted have reverses from no less than five different dies, all have the same stopping arrangement, with trefoils after DEVN and ADIVTORE. On four of the dies, the mark, probably from one and the same punch, is smaller than that on the obverses.

It is not possible to show a sequence of production in the rose obverse dies, but there is a reasonable probability that the first and last are known. What may be the first die was that used for the rose/lis on rose mule illustrated in the Lockett catalogue under no. 1698 (and Pl. XIX, 11). In addition to having been used with this reverse of an earlier type, this die has quatrefoils by the neck as on the lis and cross-fitchy obverses and in contradistinction to the saltires found on the great majority of the rose obverses. Also it has double trefoils at the end of the legend, which have not been noted on any other die.

And finally the rose mark is poorly shaped and not very clear. The normal mark is a well-shaped five-petalled flower with central pellet, such as is used on the angel reverses.

What may well be another very early die also has an unusual mark with rather smaller and more widely scattered petals than normal, which mark has been superimposed on a smaller rose or rosette, some petals of which can be seen to the right of it (Pl. XIX, 12). Its early date may be surmised from the fact that the reverse of one of the two specimens noted is the same as that of a groat having the obverse from the die which has been suggested as the first of the rose mark. The obverse of the B.M. rose groat with the mark on both sides is also from this unusual die (Pl. XIX, 13). The larger of the two marks looks to be that used for the angelets of type I, but the source of the smaller one, which is of similar style, has not yet been traced. It bears no resemblance to the rosette mentioned as found on the reverses of the groats with mark on both sides.

What is probably the last die made is the unique obverse with star stops already mentioned (Pl. XIX, 14). The significance of these stops lies in the fact that among the earliest of the groats of the next type with double crown and no mint-mark there are a few rare specimens with star stops on the reverse, and it seems unlikely that more than one punch of this unusual nature would have been made. Furthermore, the rose obverse and the no-mint-mark reverses are the only dies of their respective marks which have been found with all unbarred A's. Finally, the two known specimens of rose groat with star stops are from the same obverse die, whereas the four no-mint-mark coins noted are from three different reverse dies, which would be the normal number made for use with the obverse die. It is probable, therefore, that the four no-mint-mark groats referred to are mules with the rose mint-mark and demonstrate that the rose mark immediately preceded the first of the double-crown dies. We may hope one day to find a rose groat with star stops on both sides.

Having in mind the foregoing facts it would seem that we are not dealing with marks of equal importance. The single known lis obverse and the three cross-fitchy obverses were probably the full extent of their respective issues, and it is difficult to escape the conclusion that the lis entirely, and the cross-fitchy partly, were outside the normal run of issues. This is also indicated by the unusual spelling of the king's name on all the obverses and by the employment of the lis mark on obverse or reverse, which mark, during this reign, is often a sign of something unusual, as witness the portcullis reverses, the shillings, and the early profile groats.

None of these points applies to the rose groats, which, on the contrary, show every appearance of normality—the large number of dies, the king's name HENRIC, and the absence of a lis in the legends. If we are correct in our assumptions regarding these marks we should expect the lis and cross-fitchy groats to have been shortlived and probably partly or wholly in concurrent issue with the regular marks lis on rose and rose. The mules existing would then indicate the precise position of the two experimental marks, and confirm that the rose was the regular mark following the last of the compound marks and preceding the first of the type II groats.

First, then, there is the lis on rose groat in the B.M. collection which has a reverse from the same die as the B.M. lis groat; they are, in fact, side by side in the tray for better comparison. Second, there are the two groats with lis on rose obverses having no-mint-mark reverses of cross-fitchy type I with lis after LON, both of which are known on true coins. (See nos. 2 and 3 of the list in Section 1, and **Pl. XIX, 5**.) Here is the proof that the lis and cross-fitchy marks were more or less contemporary and followed directly on the lis on rose mark.

Finally, the cross-fitchy groat (**Pl. XIX, 10**) has a reverse of type III from the same die as the reverse found on the rose groat (**Pl. XIX, 12**), while the obverse die from which this latter coin was struck is that which was used for the two rose/lis on rose mules already mentioned, and which has been suggested as the first rose die (**Pl. XIX, 11**). These three coins, therefore, demonstrate that the rose mark also followed directly on the lis on rose, and that the cross-fitchy mark was contemporary with its first dies.

To sum up then, the evidence seems conclusive that the rose was the regular mark used between the compound marks and the no-mint-mark groats of type II, and that the lis and cross-fitchy marks were used experimentally and outside the regular series at about the time of the change from the lis on rose to the rose. There can be no question that either of the latter followed the rose, as neither can be shown to have had any connexion whatever with the groats of type II, whereas they are both found muled with the lis on rose mark. It may be added that the purpose of the two experimental issues at this time remains a mystery and no solution is offered.

In view of all the foregoing it would seem at first sight that to talk of the order of the single marks is a misnomer. That there was a definite sequence in the production of the dies, however, can be demonstrated by the introduction of a new factor, and one which has many times proved its reliability for such a purpose, and that is the lettering. Two forms of L (L1, L2) and two forms of M (M1a, M1b) are to be found on the reverses of the open-crown groats (see Fig. 2), viz.

L1 and M1a are found on the reverses of all the compound-mark groats, on the lis reverses, and on the cross-fitchy reverses of type I.

M1b is found on the rest of the cross-fitchy reverses, on all the rose reverses, and on the first groats with the new double crown.

L2 is found on the two reverses of cross-fitchy type II and on many of the subsequent reverses as well as on a few later obverses.

Here we have the final justification for the suggested order of the single marks, viz. lis, cross-fitchy, rose, and also for the order of the three types of cross-fitchy reverse. It will be remembered that type I has the lis in the inner circle as on the lis groat reverses. Type II, which still shows the lis, has it now in the outer circle, while type III has no lis in either legend and the stops used are those also employed for the rose reverses. These latter, in fact, were probably normal dies made for use with the rose obverses and the coins showing them are therefore mules, though so far only the one actual die-link mentioned above has been found.

CHAPTER II. *Type II: The Plain Double-Arched Crown Groats*

The first major change in the appearance of the bust on the groat for 150 years occurred when two plain arches surmounted by orb and cross were added to the old open crown to bring it into line with the similar crown which had already appeared on the cross-fitchy marked sovereign and ryal authorized in 1489.

1. *No mint-mark.* The first coins with the new crown bear no mint-mark, possibly because the cross on the crown occupies the space hitherto allotted to it. Apart from the crown, they differ from the previous groats in having small trefoils at the cusps of the tressure instead of fleurs. In the lettering (A), reverse cross-ends (no. 1), and the trefoil stops, however, they continue the type of the latest rose-marked coins, and the majority also have saltires by the neck.



FIG. 3.

It has not hitherto been remarked that there are, in fact, two types of the new crown which are quite distinctive, as may be seen from the illustrations (Fig. 3). Crown no. 1 is wide, with a straight base and a gap right across between the base and the jewels and lis, while at the bottom corners only one strand of hair protrudes on either side instead of the three showing beneath the open crown. Crown no. 2 is narrower and taller, having a more curved base with the jewels and lis coming down to it in the normal way, and showing only the normal three triangular spaces between, while the hair has gone back to the original three strands on either side. This second and more common type of crown is continued on the coins of the following mark, which confirms that it is the later type.

The groats with crown no. 1 are fairly scarce. They constitute perhaps a quarter of the surviving specimens, and five dies have been noted, distinguished as follows:

- 1—FRANCI, 2—FRANC, 3—FRANC followed by a quatrefoil, 4—FRANC, with a trefoil either side above the cross on the crown, 5—FRANC, with one trefoil above and one below the left arm of the cross.

The last-mentioned die in addition has ANG instead of ANGL. The use of trefoils on dies 4 and 5 may well be some form of privy marking in substitution of the mint-mark. The two arrangements mentioned were repeated on later coins with crown no. 2 and three new forms appeared, namely: trefoil above the left arm of the cross, trefoil above the right arm of the cross, and trefoils in each of the four angles of the cross. The die on which the four trefoils occur confirms the special nature of these symbols, as the one at bottom right is struck over the h of hENRIC, and so is not simply a space-filler.

All the five dies of crown no. 1 have saltires by the neck, but only about half of the surviving groats with crown no. 2 have them. As the rose groats have these symbols but the following cinquefoil groats have not, it would be reasonable to assume that those without are the later coins, but subsequent evidence will show that the presence or absence of saltires by the neck does not indicate any chronological order after the appearance of crown no. 2.

Apart from these saltires, and the trefoils by the cross which were apparently used on all the dies with crown no. 2, the later obverses have nothing of special note. The greater interest, as with the two previous marks, lies in the reverse stopping. This is even more varied than before, though in only one case are any stops to be found in the inner circle. This, as might be expected, is probably the earliest reverse. The varieties are as follows:

1. Stars after POSVI, DEVM and TAS.
2. Trefoils before and/or after POSVI and after DEVM, DEVM and ADIVTORE or ADIVTORE only.
3. Saltires (or quatrefoils) before or after POSVI, and saltires after DEVM and/or ADIVTORE.
4. Saltires (or quatrefoils) after POSVI only.
5. No stops.
6. Trefoil after POSVI and pellet after ADIVTORE.

The rare coins with star stops on the reverse are found exclusively with crown No. 1 (**Pl. XX, 1**). They have already been mentioned in connexion with the even rarer rose-marked obverses. The trefoil-stopped coins are the commonest of the series, and there are many different arrangements often complicated by the addition of a quatrefoil before or after POSVI, much as with the rose reverses. They are, of course, found with both crowns and a coin from the Lockett collection was noted with the obverse struck from the same die as one with star stops. The reverses with saltires are also found with both crowns, and have nothing to do with the earlier open-crown coins with saltires. They are fairly scarce, but a specimen has been noted with the obverse struck from the die used for the 'star' coin already mentioned, so whatever may have been the significance of the different stops it could hardly have been to indicate Pyx periods. The reverses with no stops are also scarce but these too are found with both crowns.

Finally there are the rare coins with pellet after ADIVTORE. The four specimens noted (one in B.M.) are all from the same reverse die, and all have the same obverse with crown no. 2, saltires by the neck and the king's name spelt HENRC (**Pl. XX, 2**). Incidentally, more than one die was made with the king's name spelt in this way: there was a groat in the Lockett collection with a different obverse and a reverse having no stops. These coins with pellet after ADIVTORE were probably among the last of the 'no-mint-marks', as an identical reverse, though unfortunately not from the same die, is known with an obverse having the cinquefoil mark. R. Carlyon-Britton illustrated one of these very rare coins in his 'Some Early Silver Coins of Henry VII' (*B.N.J.* xxiv (1941/2), pl. no. 13), and there was another from the same reverse die, but with a slightly different obverse, in the Lockett collection.

It remains to mention the two famous portcullis groats in the B.M. collection. These have a special experimental reverse with a portcullis in the centre in place of the pellets, and a large lis as mint-mark. The two specimens are from the same reverse die but different normal obverses, namely:

- (1) Crown 2, L1, saltires by the neck,
- (2) Crown 2, L2, no saltires by the neck,

and several specimens of normal coins are known struck from the first of these two dies. The fact that the obverse dies used have crown no. 2 disposes of the suggestion that the reverse might have some link with the lis coins of type I. Furthermore, three of the four cross-ends of the portcullis reverse take the new form adopted during the currency of the following cinquefoil mark. All this, of course is merely a confirmation that the lis mark indicated a pattern or experimental type.

2. *Heraldic cinquefoil*. The only other known groats with the crown of two plain arches have a mint-mark inserted between the cross and the king's name. This has been called the heraldic cinquefoil to distinguish it from the later plain cinquefoil or pansy. They differ from the 'no-mint-mark' groats in having returned to the large triangular fleurs used on all the open crown groats. They also present a greater number of variations for consideration. Some of these, however, accompany a second change in the form of the crown, and will therefore be dealt with separately under type IIIA.

The earliest coins are those very similar to the last 'no-mint-mark' groats, having the crown with the plain square cross, trefoil stops, and the same lettering (A) and reverse cross-end (no. 1). The face, too, has the same grim lines about the mouth, but one small change which will be noticed is that the hair beneath the crown has gone back to the type of the crown no. 1 'no-mint-marks', with only one strand standing out at each side. These early coins are found with the mint-mark on both sides or on the obverse only, and all the specimens noted have three fleurs on each side and nothing on the breast. They have no stops in the reverse inner circle.

The coins with cross-end no. 1 and the mint-mark on the obverse only, present features which may point to their being mules with the 'no-mint-mark' groats, though no die identity has yet been traced. The reverses have either a trefoil after POSVI and pellet after ADIVTORE or no stops, both of which arrangements have already been listed on the 'no-mint-mark' coins. The two known specimens of the first-named type have already been mentioned (Pl. XX, 3). The one illustrated by Mr. Carlyon-Britton has also a pellet above and to the left of the mint-mark on the obverse, not visible, if it existed, on the Lockett coin, which would seem to indicate some relationship between the obverse and reverse, in which case the 'no-mint-mark' coins would be the mules and these the normals.

These cinquefoil groats with cross-end no. 1 are scarce, as the great majority of coins of this mark have a new cross-end no. 2, which, therefore, probably appeared within two or three months of the commencement of the currency of the mark. Shortly after the adoption of the new cross-end the first main division in the obverses occurred, namely, a change in the type of cross on the orb above the crown. As already mentioned, the early cinquefoil

groats have the same square-type cross which was used on the 'no-mint-mark' crowns, but the majority have a very different style of cross, with a tall, tapering stem and short-pattée arms (see Fig. 4). At the same time the face lines were changed to give a more pleasant expression, while a further distinction is apparent in the reversed S for ET, instead of the S found on all



FIG. 4.

other groats of this reign. That these obverse changes occurred very shortly after the change in the reverse cross-end is proved by the great rarity of the groats with the old type of cross but reverse no. 2. The only one noted was in the Parsons collection.

The reverses of the earlier coins with cross no. 2 and cross-end no. 2 still have no stops in the inner circle, and they are also sometimes found with no mint-mark, but of course there is no longer any possibility that these are mules with the 'no-mint-mark' coins.

All the obverses so far mentioned have had six fleurs at the cusps and unbarred A's (A1) in GRA and FRANC and usually in ANGL also. We now come to another dividing line in the history of the cinquefoil groats, namely, the change to all barred A's on the obverses (A2), and the first to show this feature are the rare coins with only four fleurs at the cusps, two on each side (Pl. XX, 4). These also have no stops in the reverse inner circle and are occasionally found with the mint-mark on the obverse only.

The final division occurs with the reappearance of six-fleured obverses, still with cross no. 2, and cross-end no. 2, but with barred A's on both sides (Pl. XX, 5). This second issue of six-fleured coins differs from the earlier issue chiefly in having 'coded' stops in the reverse inner circle, but a new type of N with mutilated tail (N2) is also found on obverses and reverses. This use of single and double trefoils before and after CIVITAS and LONDON in various combinations represents the beginning of a long series which extended in one form or another throughout the rest of the reign, and which will be dealt with separately in the chapter on privy marks (Part II).

Whether the number of fleurs at the cusps had any special meaning or not is open to question. Neither the four-fleured nor the six-fleured coins have, of course, a fleur on the breast, but contemporary with the later six-fleur type, with N2 and stops in the reverse inner circle, at least two dies were made with an extra fleur on the breast (Pl. XX, 6). One of these has the unusual spelling AGL for ANGL, not noted on any other die of this period. This seven-fleur type was repeated on the rare cinquefoil groats with double-jewelled arches to the crown, shortly to be described under type IIIA, but there is nothing else to indicate that these were the last dies of type II, if, in fact, they were.

Summarizing these varieties we have the following picture:

1. Cross 1, reverse 1, all unbarred A's on the obverse.
2. Cross 1, reverse 2, ,, ,, ,,

3. Cross 2, reverse 2, all unbarred A's on the obverse.
4. Cross 2, reverse 2, barred A in ANGL only.
5. Cross 2, 4 fleurs, all barred A's on the obverse, N1.
6. Cross 2, 6 fleurs, trefoils in reverse i/circle, N2.
7. Cross 2, 7 fleurs, " " "

Finally, with mint-mark cinquefoil, there is the unique 'Sovereign' groat, described by the eighteenth-century numismatists Ruding, Folkes, and Snelling, and now in the Hunterian Collection, Glasgow. It has:

Obv. Figure of the king, robed and crowned, with sceptre and orb, seated facing on throne, the word LONDON beneath, and normal legend in the outer circle.

Rev. Shield of England and France over long cross, with POSVI DEVM legend as on the later profile groats.

Its genuineness has already been dealt with (E. J. W. in *B.N.J.* vol. xxv), and we can now go farther, and, with the aid of the data listed above, place it in its exact position in the series. The obverse has all barred A's but N1, and the reverse has cross-end no. 2. It is, therefore, contemporary with the scarce four-fleur coins which preceded the introduction of the groats with N2 and trefoil-stopped inner circles on the reverse, which constitute perhaps half of the issue. It is probably a pattern for the silver coinage, and the obverse is, in fact, a faithful copy on a smaller scale of the seated figure on the second issue of the sovereign which bears this mark and which might well have appeared about the same time, while the reverse design is that eventually adopted for the profile issue. We may think it a pity that these attractive types, though considered suitable for the minute area of the penny, were rejected for the groat.

CHAPTER III. *Type III: The Early Jewelled-Crown Groats*

1. *Type IIIA: Heraldic cinquefoil.* The rare groats of the cinquefoil mark having jewels added to both arches of the crown appeared at the very end of the currency of the mark and might well be due to the influence of Alexander of Brugsal, who was called over to be the King's Engraver in 1494. They represent a distinct change of style, a change, incidentally, which was completed on the first coins of the following mark, the escallop, by a modification of the only hitherto unchanged feature, namely, the old conventional style of hair with the curls turning outward at the ends.

In addition to the new crown then, the face is narrower with pointed chin and a new plain lettering (B) is used, notable for the Roman M which appears on the reverses, not seen since the early groats of Edward III, and the very distinctive open or Greek E. Also, rosette stops were substituted for the old trefoils and a new cross-end (no. 3, Fig. 1) was employed for the reverses. There is a unique groat struck from what must have been the very last obverse die of the old type II, which has the king's name in the new plain lettering with open E and the rest of the legend in the old lettering A (Pl. XX, 8).

So far three obverse dies of this new type IIIA, of the heraldic cinquefoil mark, and six reverses have been noted. One of the obverses has the normal

six fleurs (die 1), while the other two have seven fleurs, one on the breast (Pl. XX, 10). From one of the latter (die 2) no less than nine coins were traced, but of the other (die 3) only one was noted.

Quite as numerous as the true coins of type IIIA are the mules with the preceding and following types, that is with the cinquefoils of type II and the escallops of type IIIB, while mules also exist which ignore type IIIA altogether, combining the dies of the two latter types. This illustrates well the limited nature of type IIIA, for which quite possibly only the three obverse dies noted were actually prepared. The reverses found with all the mentioned mules have double trefoils or rosettes before and after CIVITAS and LONDON, which is the form found on the late cinquefoil dies of type II. The 'coded' stopping found on the earlier dies was not, in fact, resumed until the late escallops.

Here are details of the known specimens¹ of the three types of mules mentioned:

First, those with the earlier cinquefoil type II dies:

1. *Obv.* Cinquefoil type II, 6 fleurs, N2/*Rev.* Type IIIA, die A (BM) (Pl. XX, 9)
2. *Obv.* Cinquefoil die IIIA-1/*Rev.* Type II, trefoils in i/c, N2 (2 coins)
3. *Obv.* Cinquefoil die IIIA-2/*Rev.* „ „ „ (2 coins)

Second, those with the following escallop mark:

4. *Obv.* Cinquefoil die IIIA-2/*Rev.* Escallop, lettering B2 (4 coins)
5. *Obv.* Escallop, let B1/*Rev.* Cinquefoil type IIIA, die B (2 coins)
6. *Obv.* Escallop, let C1/*Rev.* „ „ „ (2 coins)

Finally, the mules between the late cinquefoil type II dies and the earliest escallop dies ignoring type IIIA:

7. *Obv.* Cinquefoil type II, 6 fleurs, N2/*Rev.* Escallop, let. B2 (LAL Pl. VII, 12)
8. *Obv.* Escallop, let B1/*Rev.* Cinquefoil type II, trefoils, N2 (2 coins)
9. Escallop special die/*Rev.* „ „ „ (Roth II, 1918, 214-Pl. IV)

This last coin will be described in the next section.

2. *Type IIIB: Escallop.* What was undoubtedly the first die made for the new mark is that used for the unique mule just mentioned. This appeared in the Roth sale of 1918, but it has not been possible to trace its present whereabouts. It differs from the normal in many ways and has every appearance of being a trial piece from the hand of Alexander de Brugsal. Firstly there are no fleurs at the cusps, secondly the crown is of unusual style with more prominent jewellery and a large cross occupying the place of the central lis, and thirdly the hair is not arranged in conventional curls but is brushed out almost horizontally from the face. Finally the lettering is generally of a plainer style even than the normal B1 or B2. As already noted the reverse is not of type IIIA but of late type II.

The obverse design adopted as standard for the new mark incorporates

¹ Other than those specially noted, the coins listed are nearly all in the collections of the writers, and more than one specimen of most of them exists.

none of these revolutionary features. It is, in fact, as already stated, a continuation of the IIIA obverse with the sole exception of the hair punches. These are given a rather less conventional appearance, with the curls now turning inwards instead of outwards at the ends. The reverses also continue the type of the IIIA's with cross-end no. 3 and double rosettes (later trefoils) before and after CIVITAS and LONDON.

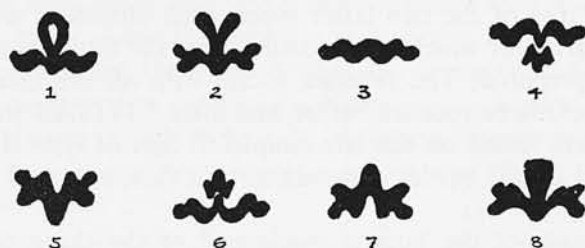


FIG. 5.

It is possible to place the obverse dies of the escallop mark in reasonable order of sequence by reference to the elaborate series of varieties which are such an extraordinary feature of the new mark, and which must have had a definite privy significance. These consist of no less than five different variables, viz. eight types of fleur, two kinds of stop, two cross-ends, two forms of reverse legend, and seven types of lettering, while, as will be explained, the last type of lettering introduces a further and very complex variable. The combination of these make up the following picture:

1. Fleur no. 1, rosettes, reverse no. 3, lettering B1 or B2
2. „ „ „ „ C1 or C2
3. „ „ „ „ D1
4. Fleur no. 2, „ „ „ D2
5. „ rosettes/trefoils, „ D2 (Mule 4/7)
6. Fleur no. 3, trefoils/rosettes, „ D2 (Mule 7/4)
7. „ trefoils, „ D2
8. Fleur no. 4, „ „ D2
9. Fleur no. 5, „ „ D2
10. Fleur no. 6, „ „ D2
11. „ trefoils/rosettes (new rev. leg.) D2/E1 (Mule 10/13)
12. Fleur no. 7, rosettes/trefoils „ E1/D2 (Mule 13/10)
13. „ rosettes, „ E1
14. Fleur no. 8, „ „ E1
15. „ „ reverse no. 4, „ E1

The eight types of fleur (see Fig. 5) found on these groats are an outstanding novelty, quite unknown in any other mark, and it is interesting to speculate on their purpose. The supporters of the three-monthly Pyx period marking theory¹ have certainly a basis for argument here for the escallop mark could well have been current for two years, but the use of the other

¹ See 'The Heavy Groats of Henry VI', by W. J. W. Potter (*B.N.J.* xxviii, 1957) for views on this.

privy marks, the stops and lettering, in conjunction with the fleurs would need a convincing explanation.

The illustrations give the forms of the eight fleurs, and the order in which nos. 1, 2, 6, 7, and 8 have been placed is fully established, not only by the mules with the preceding and succeeding marks, but also by the lettering, cross-ends, and mules within the mark as indicated in the list above. When a second trefoil-stopped fleur is found with rosette reverse, at present missing, no. 3 will have been determined, and then only the order of nos. 4 and 5 will remain conjectural. Incidentally, groats with fleurs nos. 3-5 are of great rarity, and only three or four poor specimens have been noted.

As to the two types of stop, as will be seen, fleurs nos. 1 and 2, and 7 and 8 are found with rosettes, and the others with trefoils. That these were possibly intended as further differentiation of the privy marks seems possible, as on many of the obverse dies the top arm of the cross has been cut off short to give room for a rosette or trefoil directly above. Furthermore, there is a unique groat with fleur no. 1 and lettering C1 which has rosettes in the angles of the tressure on the obverse, recalling a similar type in the early groats of Henry VI (Pl. XX, 11). It is a pity that this additional emphasis on the stop was not continued.

The two forms of reverse legend are connected with the lettering change from the Roman to the Lombardic M shortly to be described. The original form of: POSVI/DEVM*A/DIVTOR/E*MEVM, *CIVI/TAS* *LON/DON*, with three Roman M's and first rosettes and then trefoil stops was preserved during the currency of the first six fleurs. With the change to fleur no. 7, the reintroduction of rosette stops, and the use of new and larger letters, the legend was shortened to: POSVI/DEV*A/DIVTO/E*MEV, with one Lombardic M, while the 'coded' variation of the stops in the inner legend, as on the later cinquefoils, was resumed.

The lettering used on these coins merits detailed description, as it is almost as varied as the fleurs. The earliest coins have the plain lettering (B) with Greek E and Roman M which first appeared on the IIIA coins of the cinquefoil mark. This lettering at first retained the C and D of alphabet A, and has been called B1. On a few rare dies, both obverse and reverse, however, a C and D of very plain type, matching the other letters, is used, and this lettering has been called B2. The short life of these two alphabets may be judged from the fact that two escallop/cinquefoil mules with reverses from the same die and obverses with lettering B1 and C1 are known.

This next type C is an ornate lettering of a distinctive type with deeply notched serifs, which at first retained the Greek E, constituting type C1. The substitution of a normal, though narrow, closed E, constitutes type C2. Both these types include the plain Roman M. The next change, still during the currency of fleur no. 1, was to a rounder style of lettering (D) of which the L, V, and R are especially distinctive, the former being a close approximation to L2 of alphabet A. The earlier reverses with this lettering retained the P with long bottom serif belonging to alphabet C2, and might be referred to as lettering D1, but with the change to fleur no. 2 a P with curved serifs to match the other letters was introduced on the reverses, making lettering D2. The Roman M in these two types has now notched ends to the top and bottom of

the legs (M3). Lettering D was retained throughout the life of fleurs nos. 3, 4, 5, and 6.

The change to lettering E came with the introduction of fleur no. 7, when the Roman M was finally replaced by a Lombardic M and the letters with curved serifs went back to the notched style of lettering C. This time the V also received notched serifs, while the L is distinguished by two notches along the base instead of one. This last style of lettering inaugurated a new form of privy marking, namely, broken letters, that is letters with one or more of the usually prominent serifs broken off. The complexity of this system can only be properly appreciated by a study of the number of letters affected and the combinations of these which were employed. As the significance of these marks is unknown there is little point in listing them. On the other hand, the letters and combinations used were changed at intervals and can therefore be of assistance in establishing the order of dies. In so far as they can help in this they will be mentioned.

In summary, the various alphabets may be recognized as follows (see Fig. 6):

B1-E1, D1, L3, P1, V3, M2	D1-E3, D1, L5 (P2), V5, M3
B2-E1, D2, " "	D2- " " (P3), "
C1-E1, D1, L4, P2, V4, M2	E1-E4, D3, L6, P4, V6, M4, R2
C2-E2, D1, " "	E2- " " M5, R3

Two unusual groats remain to mention. Firstly, a groat with fleur no. 1 and lettering C1/C2 with the reading DITORE/V', where the die-sinker, having omitted the V in DIVTOR, added the E to fill up the space, and then put a V and abbreviation mark for VM to agree with MEVM where the E is normally found. A spelling error of this type is unusual at this time. Secondly, there is the groat illustrated by Dr. Lawrence on pl. viii, no. 1, of his 'Coinage of Henry VII' (*N.C.* xviii), of which another specimen has also been noted. It has a normal obverse with fleur no. 1, and lettering D1, but a special reverse with annulet stops and mullet before CIVITAS, lettering B2, and an elaborate version of cross-end no. 3.

3. Type IIIB. *Pansy*. The other mint-mark of type IIIB is the pansy. The majority of pansy groats encountered are of the later type IIIC with the realistic portrait, but in spite of their comparative scarcity, the specimens of type IIIB examined showed great complication in minor varieties. Superficially they are identical with the late escallop groats, but in addition to the crown (no. 1) and cross-end (no. 4) borne by these latter groats, a new form of each is introduced, and the four possible combinations of these are all found used with two further styles and sizes of lettering with their various broken letters. To emphasize that the combinations of crown and cross-end are intended to have some significance, the few groats found with crown no. 1 and cross-end no. 4, that is, the crown and cross-end of the latest escallop groats, all have a pellet beneath the right arm of the cross over the orb of the crown (Pl. XX, 13).

In spite of this, however, it seems doubtful whether these crowns and cross-ends were used in any particular order, as the evidence of the mules between

these IIIB pansies and the escallops on the one hand and the IIIC pansies on the other is hopelessly contradictory. The three escallop/pansy mules noted, all have reverses of the new type with cross-end no. 5, as has also the solitary IIIC/IIIB pansy mule (B.M.). The two IIIB/IIIC mules on the other hand,

Lettering B, C, D and E.

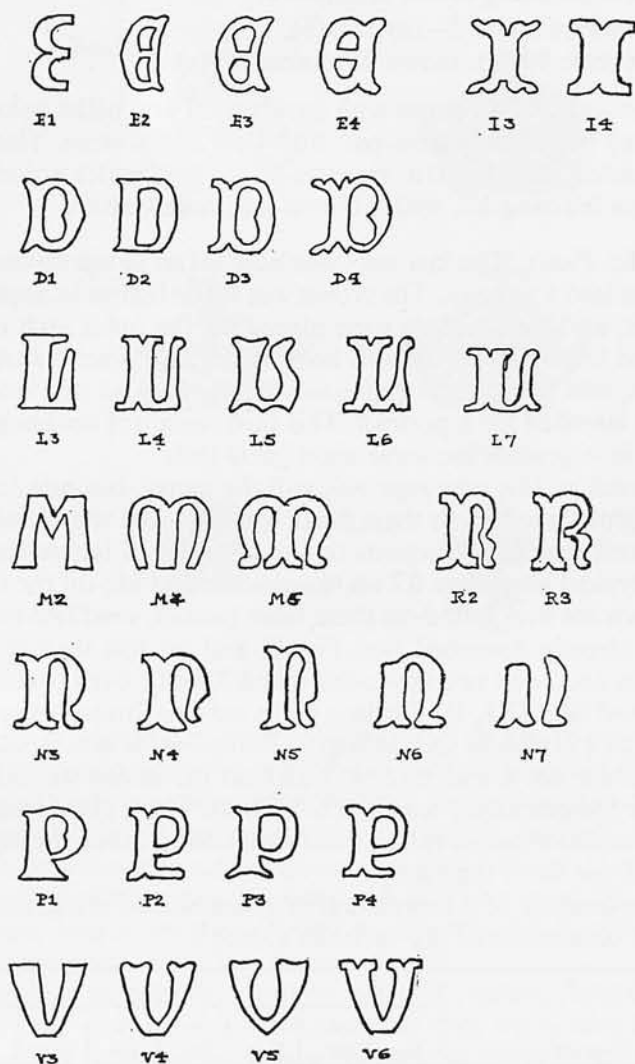


FIG. 6.

which are from the same obverse die having a modified form of crown no. 1 without the pellet [this has the upper of the two bands slightly thicker than the lower, a form not noted on any true coin] have reverses distinguished by the new IIIC lettering (E2) including M5, and both have cross-end no. 7 with no broken letters (Pl. XX, 14).

The three forms of lettering appearing on these groats make a complex

picture even more complicated, but fortunately a certain pattern is observable in their use. The three styles are as follows:

- (a) Normal E1 with large square-ended serifs, usually with broken I and T,
- (b) Slightly shorter less elaborate copies of (a) also with broken I and T,
- (c) Small plain letters with broken I, T and also N.

These forms are generally found as follows:

Crown 1, reverses 4 and 5—(a) and (b).

Crown 2, reverse 4—(b), crown 2, reverse 5—(c).

but as a final puzzle, a IIIB pansy with crown no. 1 and pellet below the cross has been noted which has cross-end no. 4 on the reverse. This reverse is otherwise identical with the IIIC reverses of the two mules noted above, i.e. having the new lettering E2, with M5 and no broken letters.

4. Type IIIC. *Pansy*. The last step was now taken in transforming the old full-faced bust into a portrait. The crown was made lighter in appearance and slightly larger, and small jewels were placed on the outer arch only; pupils were provided for the eyes, the stiff lines of the hair were transformed into realistic curls, and the general expression of the face altered into what was undoubtedly intended for a portrait. This bust remained unchanged until the profile came into general use some eight years later.

The first mark of this new type was still the pansy, but new lettering (E2) was used, slightly larger even than the original E1 and more elaborate, with wavy serifs and central projections to the interiors of letters such as C, D, and O. The typical letters are R2 on the obverse and M5 on the reverse. Two types of crown are also found on these later pansies, modified in general appearance as already described (see Fig. 7) and no less than three types of cross-end, viz. no. 5 and two new ones, 6 and 7, while both rosette and saltire stops were used (Pl. XXI, 1). Further, there are two forms of the pansy mark in type IIIC, as will also be seen in Fig. 7. Form 2 is the late type, being found only with crown no. 4 and reverse 7 and on the mules with the following mark, and is comparatively scarce (Pl. XXI, 2). These two forms were originally considered as separate marks, the former being called the regular cinquefoil and only the latter the pansy.

Here is an analysis of a representative collection of the pansy-mark coins showing the occurrence of the varieties named:

Obverses	Reverses						Total
	4 Ros.	5 Ros.	5 Salt.	6 Ros.	6 Salt.	7 Salt.	
Type IIIB, crown 1	6	..	..	..	..	..	6
" " 2	2	13	..	..	..	..	15
Type IIIC, crown 3	..	..	7	3	2	2	14
" " 4	..	..	1	..	15	11	27

The evidence for the order of these varieties in type IIIC is just as contradictory and puzzling as in the case of type IIIB. If we are to take the stops used as a guide the earliest pansies of type IIIC had the new cross-end no. 6 which continued the IIIB rosettes, and only later was no. 5 revived, to be

followed finally by no. 7, which is in effect a modified form of no. 5 with the swelling at the neck smoothed away. This reasonable arrangement is unfortunately not borne out by the IIIc sides of the three mules described in the preceding section, as the two IIIB/IIIc mules have saltire stops and cross-end no. 7 on the reverses, while the IIIc/IIIB mule has saltire stops on the obverse.

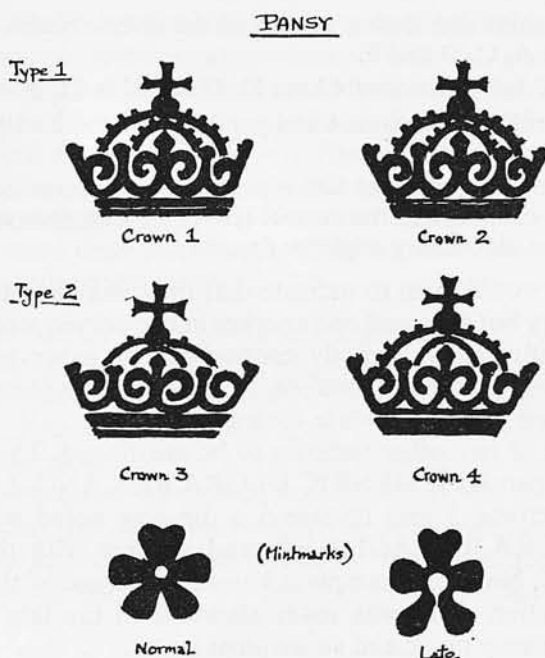


FIG. 7.

At first sight it would seem highly unlikely that the mules between the two types of pansy should have the last type of IIIc reverse, but there are two strong pieces of corroborative evidence. First, the late pansies of form 2 all have cross-end no. 7, as do the mules with the following Leopard's head mark, and this cross-end is continued on all subsequent marks up to and including the greyhound's head. Second, the only reverse dies among the IIIc pansies with no broken letters are those found on the IIIB/IIIc mules and on the normal IIIc coins with crown no. 3 and reverse 7.

As to the broken letters, first noted on type IIIB pansies, these are so varied and complex that were it not for the fact that they occur also on the half-groats and angels, and that a pattern of sorts is traceable in their use, it would be tempting to attribute them all to the use of accidentally broken punches, especially when we see that the various forms of broken C are always accompanied by the equivalent broken D, i.e. the C-punch reversed.

Here is a list of the more obvious forms encountered:

- A = E with bottom serif missing.
- B = C, D with both serifs missing.
- C = C with top, D with bottom serif missing.
- D = C with bottom, D with top serif missing.

- E = I with bottom right serif missing.
- F = I with top right serif missing.
- G = I with bottom left serif missing.
- H = R with bottom left serif missing.
- I = T with bottom left serif missing.

and here is the pattern of use of these forms:

1. The reverse 5 coins with both crowns, and the reverse 6 with crown 3 have A, B, D and E or A, C, D and E.
2. The reverse 6 coins with crown 4 have H, D and H or D, F and H.
3. The reverse 7 coins with crown 4 and pansy no. 1 have I only, and those with pansy no. 2 have D only.
4. The only coins with no broken letters are the IIIC reverses found on the mule with type IIIB obverse, and the normal IIIC coins with reverse 7 and crown 3. (Among these a die identity might be found.)

This evidence would seem to indicate that the cross-ends and crowns were not contemporary but followed one another in correct sequence, but this only deepens the confusion, as it flatly contradicts the other evidence already adduced. It is only possible, therefore, to set down the facts as they occur, and leave someone else to elucidate the mystery.

There are one or two other varieties to be mentioned. The normal legend on the type IIIC pansies is HENRIC.DI.GRA.REX.ANG.Z.FR, but among the coins with crown 3 and reverse 5 a die was noted with the legend: HENRIC.DEI.GRA.REX.AGL.Z.FR, and another with the king's name spelt HENNRIC. No other example is known of the use of the spelling DEI, but the abbreviation AGL was made standard in the late coins with the second form of pansy mark and subsequent issues.

Another obvious change in these late coins and the issues immediately following is an increase in the size of the flan from 24/25 mm. to 26/27 mm., giving all those that have survived unclipped a complete outer edge. No record, however, is known of any mint order to improve the coinage in this way as in the case of the later greyhound's head and crosslet groats. There was also some minor modification to some of the letters, of which the I might be specially mentioned, the wavy serifs of this letter being replaced once again with plain ones. One or two of the IIIC pansies, as with later coins of this type, are found without stops on the obverse. The 'coded' stopping in the inner circles was continued as before, and included an occasional absence of all stops. Lastly, in the Carlyon-Britton collection was a groat with crown no. 4 having no fleurs at any cusp—probably a die-sinker's error. Curiously, however, the reverse cross-end no. 7 is of somewhat modified form.

5. *Leopard's Head Crowned and Lis-issuant-from-Rose.* These two rather scarce marks continue the lettering and reverses of the later pansies, and the first-named also continues the broken letters C and D noted on the pansy no. 2 dies. This system of privy marking, however, was discontinued during the currency of the mark, as it is not found on either side of the mules with the L.I.R., nor on any groats of this latter mark.




Though the groats of the latter mark appear entirely regular in their lettering the L.H.C. coins show one or two unusual forms. The first is a peculiarly

shaped C and D punch with vertical serifs (D2) not noted elsewhere. This is found used on several obverses and reverses and is usually broken (**Pl. XXI, 3**). The second, found on a groat with the rare abbreviation AGLI instead of AGL, is a thin tall R recalling R2*b* of the Canterbury half-groats (see Chap. V). On this coin the C's and D's are normal on both outer circles but are also broken.

As the L.H.C. mark is unknown on the angels which, according to the bullion figures, were in continuous production with the groats, it might be thought possible that it was used concurrently with the L.I.R. on the silver. The known groat mules, however, are Pansy/L.H.C., L.H.C./L.I.R., and L.I.R./Anchor, and do not include any Pansy/L.I.R. coins, and it would appear from this that the marks followed one another in the normal sequence on the silver. One curious fact is that, whereas the mules between most marks of this reign are more than usually rare, those between the above-mentioned marks are comparatively common.

6. *Anchor*. The earliest coins of this mark are identical with those of the previous three marks, having lettering E2, the large flan and cross-end no. 7 on the reverse. The anchor mark found on these rare early groats and on the mules with the L.I.R. mark is always in the reversed position (**Pl. XXI, 4**). Very shortly a new cross-end no. 8 was provided, and at the same time the anchor began to appear in the normal position. Only two groats were noted with normal anchor on the obverse and the early reverse with cross-end no. 7, but with the appearance of cross-end no. 8 no pattern can be observed in the position of the anchor as the two types seem to have been used indiscriminately.

The foregoing can be demonstrated by an analysis of specimens in the B.M. and Lingford collections, viz.

	Cross-end 7		Cross-end 8			Total
		Diff.			Diff.	
Lingford	3	1	8	15	14	41
B.M.	4	1	12	29	19	65

The introduction of cross-end no. 8 brought other changes. The flans were slightly reduced in size once more and the lettering underwent considerable modification, the plain, fairly short serifs being lengthened and elaborated with double notches (E3). In the case of some of the letters, of which the D is a special example (D4), this represents most delicate and beautiful work on the part of the engraver. Coincident, however, with this extra ornamentation of the lettering, the entire effect was spoilt, not only by the careless placing of individual letters, especially on the reverses, but also by the reintroduction of broken letters. Specially noticeable among these are the I, which loses one or both serifs at the bottom, the T, losing one bottom serif, and the E which loses most of the lower part. Another notable irregularity is in the size of some of the letters used, among which may be mentioned the small C, D, and L (L7), and the very large E and S. The N in this alphabet is of the form N2.

Though the great majority of the anchor groats with cross-end no. 8 have

the ornate letters of E3, showing considerable variation in finish with the wearing of the punches, there are in existence a few scarce coins with the original E2 lettering, and N3 in plain form with square serifs and broad up-rights (**Pl. XXI, 5**). These coins were probably struck towards the end of the currency of the mark, as this is the only form of lettering found on the anchor side of the mules with the following greyhound's head mark. These mules always have the anchor on the obverse, and several dies are known used in this way, but though a large number of the normal groats were examined, none of these mule dies were found used on true coins. They are notable not only for the broad plain lettering, but also for the mint-mark, which is always reversed, rather smaller than the normal, and set well above the inner circle.

Similar lettering is also found on the scarce coins with mint-mark on the reverse only (**Pl. XXI, 6**). Here again at least three obverse dies without the mark were noted, and it is unlikely, therefore, that this was an engraver's error. These dies, incidentally, were certainly among the last anchor dies to be made, as a groat was noted with G.H. 1 mark on the reverse and an obverse from one of the three mentioned dies without mint-mark. This is evidently an Anchor/G.H. 1 mule and not a G.H. 1 groat with mint-mark on the reverse only as might otherwise be imagined (**Pl. XXI, 7**).

The greyhound's head coins of type IIIC are dealt with separately in the following chapter.

CHAPTER IV. *The Full-face Greyhound's Head and Cross-Crosslet Groats*

So far an orderly sequence of types has been encountered representing the slow evolution of the royal bust from the conventional medieval style of the previous 150 years toward the Renaissance ideal of an actual portrait. In the case of the next two marks to be examined, the greyhound's head and cross-crosslet, we come to a period of more varied experiment, when three forms of crown were used in the same sequence on both the marks, while at the same time an entirely different type of portrait, the profile, was being developed. The types of crown employed were the double-arched type IIIC already met with, and differing forms of a new-style crown with a wide single arch, classified as Type IV. The profile groats, which have this latter form of crown, but of a different style, are placed in a class of their own, Type V, and will be dealt with in a separate chapter.

1. *Greyhound's head.* This mark is found in two distinct forms. The earlier, which Mr. Carlyon-Britton, who first recognized them, has called G.H. 1, has a large head and neck, with small eye and ears. G.H. 2 on the other hand has a small head and neck, large eye, and long ears extended backward and usually folded downward.

The groats of the G.H. 1 mark all have the double-arched crown of type IIIC, and reverses with cross-end no. 8, like the preceding anchor-mark coins. The lettering, however, is the normal E2 as used on the early anchor coins, and not the specially ornate E3 nor the plainer E2 of the later anchors. As to the stops, these are saltires as before, but they are used in an unusual way,

and, combined with the N's in LONDON, appear to have been a very elaborate form of privy marking. As this was continued on the early G.H. 2 groats, however, an account will be postponed until these latter are described.

Before passing on to the G.H. 2 mark, there are one or two varieties on the G.H. 1 groats which might be mentioned. In addition to the rare early coins with mint-mark on the reverse only, mentioned at the end of the last chapter, a groat with the spelling hENIC has been noted. This has a saltire before the mint-mark on the reverse. There is also a groat without stops on the obverse. This is unusual in view of the importance apparently attached to the use of the stops at this time. Finally there are the mules with the various types of G.H. 2 obverses and reverses, and with the rose reverses which have the same cross-end and lettering as the earlier G.H. 2 groats. These will be fully described when dealing with the latter coins, or will be found listed in the table of known types at the end of the section.

Lettering F

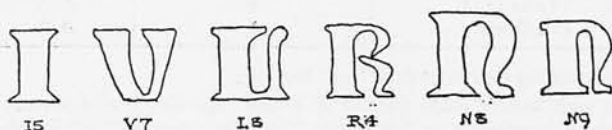


FIG. 8.

The first groats with the G.H. 2 mark are obviously those having the same double-arched crown as the G.H. 1 coins, but they are immediately distinguished from the latter, apart from the form of mark, by the new smaller, broad and plain lettering (F) (see Fig. 8). The reverses are further distinguished by a new cross-end with plain instead of wavy termination (no. 9). These G.H. 2 dies are found muled both ways with G.H. 1 dies, and are also known with reverses having the mint-mark rose. These reverses are a remarkable feature of the greyhound's head groats. They seem to have been made for use with the early G.H. 2 obverses just described (type IIIc), as they are identical with the normal reverses of the type except for the mint-mark, having lettering F and cross-end no. 9. Six dies have been noted, and they are found used not only with the IIIc G.H. 2 obverses but also with G.H. 1 obverses, and with one of the single-arch type G.H. 2 obverses to be described. The first two mentioned types are not especially rare, but only four or five specimens of the last-mentioned have been traced, all from the same obverse die with abnormal fleurs.

Now as to the stops on these type IIIc greyhound's head groats. They are found in three forms or 'states', i.e. the normal saltire of ornamental form (A), the same with one arm broken off (B), and ditto with three arms broken off (C). This last type was noted by Mr. Carlyon-Britton in his article 'The Last Coinage of Henry VII' where he calls them 'peculiar'. As for the N's in LONDON, four types are used with the G.H. 1 mark, namely, N3 as on the previous marks, and three new ones: N5, a tall, thin letter; N6, a plain N with no serif at top left, and N7, a broken form of N6 (Fig. 6); and two on the G.H. 2 reverses, i.e. N8, a very large N, and N9, a plain letter something like

no. 9 (Pl. XXI, 10). Just before the change of mark to the cross-crosslet, however, the new type 10 with splayed termination was introduced. The groats with G.H. 2 and this latter reverse are rare, and that very few dies were made is evidenced by the fact that the very rare crosslet/G.H. mules are known with both forms of reverses (cross-ends 9 and 10).

Lettering G.

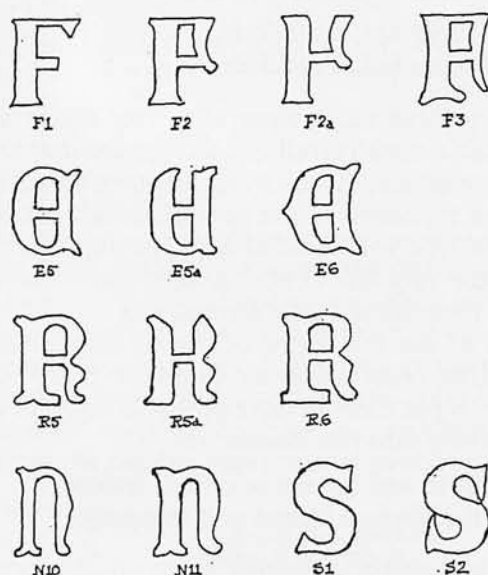


FIG. 9.

One very obvious feature of these late G.H. 2 groats with lettering G is the complete beaded outer edge which they all display, in contrast to the earlier coins whose flans are usually smaller and often irregular, due as frequently to poor workmanship as to the clipping evil. These groats, therefore, must be the first-fruits of the Act of 25 January 1504, which prescribed a full outer circle on all coins, and which will be fully discussed in the chapter dealing with the question of the dating of marks and types.

Summarizing the many varieties of the greyhound's head mark, we have:

Obverses				Reverses				
Type	Crown	Mark	Let.	G.H. 1 8 E	G.H. 2 9 F	Rose 9 F	G.H. 2 9 G	G.H. 2 10 G
IIIc	Double arches, outer jewelled . .	G.H. 1	E	x	x	x	..	..
"	" " " " . .	G.H. 2	F	x	x	x	x	..
IVa	Single-arch, 1 bar, 4 crockets . .	G.H. 2	F	x	..	..	..	..
"	" (Special fleurs)	G.H. 2	F	x	x	x	..	..
IVb	Single-arch, 2 bars, 6 uprights . .	G.H. 2	G	..	x	..	x	x

2. *Cross-Crosslet*. This mark was the last to appear on the full-face groats, and it is found on obverses with the three types of crown so far described, viz.

1. Double arches, outer jewelled,
2. Single arch, single bar, 4 crockets (normal fleurs),
3. Single arch, double bar, 6 small uprights,

plus two rare varieties of nos. 2 and 3, viz.

4. Single arch, double bar, 4 crockets,
5. Single arch, double bar, 6 crockets.

The fact that the three main types of crown above are also found on G.H. 2 groats, would normally lead one to suppose that the two marks must have been in concurrent use, especially as the three forms of crown represent definite steps in the evolution of the portrait groat. All the crosslet groats, however, are of the type with beaded edge, having lettering G and reverse no. 10, exactly as the very last G.H. 2 groats, and there can be little doubt that they followed these latter in the normal way.

As to the order of the five forms of crown listed, there are fortunately many minor varieties, constituting an elaborate privy-marking system, by which it is possible to put them in their probable order of appearance. These varieties can be divided into two classes, viz.

1. Variations in form and breaks in certain letters.
2. Variations in the obverse legend and stopping.

Taking first the alphabetic variations, there are five key letters concerned in the changes in form, viz. E, F, N, R, and S, while the breaks occur on the letters E, F, I, N, and R, a formidable list. The following table shows how alphabet G has been subdivided to cover the changes noted, the *a* numbers indicating broken letters:

G1 has F1, E5 <i>a</i> , and R5	}	G1 and G2 have N1 and S1
G1 <i>a</i> has F1, E5 <i>a</i> , R5, and broken I		
G1 <i>b</i> (reverses only) has E5, R5, and broken I		
G2 (obverses only) has F2, E5 <i>a</i> , R5 <i>a</i> , and broken N		
G3 <i>a</i> has F2	}	G3 and G4 have N2 and S2
G3 <i>b</i> has F3		
G4 <i>a</i> has F3, E6, R5, and no broken letters		
G4 <i>b</i> (obverses only) has F2 <i>a</i> , E6, R5, and broken I		

As to the form of the obverse legend, the key word appears to be ANGLIE, and its various abbreviations were apparently used in a fixed order with each type of crown and mint-mark. On the opposite page is a list of the forms so far encountered.

As will be seen, there are one or two gaps which it may be possible to fill when further specimens turn up. On the other hand, it is quite possible that ANGLI was not used until the single-arch crosslets, and that AGL only appeared on the solitary die with double bar and four crockets before the final full-face issue. This latter would appear to have been contemporary with

the first regular profile crosslets, which also have AGL. The change from the 4-croquet G.H. 2 to the 6-upright form, and the change from the latter to the double-jewelled crosslets, both apparently occurred when ANGL was being used.

<i>G.H. 2 Single arch, single bar, 4 crockets</i>	<i>G.H. 2 Single arch, double bar, 6 uprights</i>	<i>Crosslet Double arch</i>	<i>Crosslet Single arch, single bar, 4 crockets</i>	<i>Crosslet Single arch, single bar, 4 crockets</i>	<i>Crosslet Single arch, double bar, 6 uprights</i>
—	—	—	ANGLI (G3b)	—	ANGLI (G4a)
—	—	—	ANGLIE (,,)	ANGLIE (G4a)	—
—	ANGL (G1)	ANGL (G2)	ANGL (,,)	ANGL (,,)	ANGL (G4b)
—	AGLIE (,,)	AGLIE (G3a) Single arch, Double bar, 4 crockets		AGLIE (,,) Single arch, Double bar, 6 crockets	AGLIE (,,)
AGLI (F)	AGLI (G1, 1a)	—		AGLI (,,)	AGLI (,,)
—	—	AGL (G3a)		—	AGL (,,)
ANGL (F)	ANGL (G1a)	—		—	—

If we now apply these findings to a representative selection of groats, including the rare mules between the marks, we obtain the following picture, from which it is evident that the three main forms were used in the same order as in the G.H. 2 mark. Whatever the significance or purpose of these privy markings and the curious repetition of crown forms, they certainly enable the dies to be placed in their probable order of use, and later on it will be possible also, by their aid, to put the experimental profile groats in sequence.

G.H. 2 (Single bar and 4 crockets):

- | | | |
|-----------------------------------|---|-----------------------|
| 1. AGLI.Z.FR, single saltires, F. | { | Rev. G.H. 1 and Rose. |
| 2. ANGL.Z.FR, „ F. | | Rev. 9, DIVTO, F. |
| | | „ 9, „ F. |

G.H. 2 (Double bar and 6 uprights):

- | | |
|------------------------------------|----------------------|
| 3. ANGL.Z.FR, single saltires, G1. | Rev. 9, DIVTO, F. |
| 4. „ „ „ | „ DIVTOR, G1. |
| 5. AGLIE.Z.FR, „ „ | „ „ „ also DIVTO, F. |
| 6. AGLI.Z.FR, „ „ | „ „ „ |
| 7. AGLI.Z.FRA, „ G1a. | „ 10, DIVTOR, G1b. |
| 8. ANGL.Z.FR, „ „ | „ „ „ |
| 9. ANGL.Z.FRA, „ „ | „ „ „ (RCB) |

Crosslet (Double-arched crown):

- | | | |
|--------------------------------------|-----------------|-------------------|
| 10. ANGL.Z.FRA, single saltires, G2. | Rev. (G.H. 2) { | 9, DIVTOR, G1. |
| 11. „ „ „ | | 10, DIVTOR, G1b. |
| 12. AGLIE.Z.F, double saltires, G3a. | | „ 10, DIVTOR, G3. |
| 13. AGLIE.Z.FRA, „ „ | | „ 10, „ „ |
| | | „ DIVTO, „ |

Crosslet (Double bar and 4 crockets):

- | | |
|--------------------------------------|----------------------|
| 14. AGL.Z.FRA, double saltires, G3a. | Rev. 10, DIVTOR, G3. |
|--------------------------------------|----------------------|

Crosslet (Single bar and 4 crockets):

- | | |
|--|----------------------|
| 15. ANGLI.Z.FRA, single saltires, G3b. | Rev. 10, DIVTOR, G3. |
| 16. ANGLIE.Z.FR, „ „ | „ „ „ |
| 17. ANGL.Z.FR, „ „ | „ „ „ |
| 18. ANGLIE.Z.FR, „ G4a. | „ DIVTO, G3. |
| 19. ANGL.Z.FR, „ „ | „ „ G4a. |
| 20. AGLIE.Z.FR, „ „ | „ „ G3. |

Crosslet (Double bar and 6 crockets):

- | | |
|--|-----------------------|
| 21. AGLI.Z.FRAN, single saltires, G4a. | Rev. 10, DIVTOR, G4a. |
|--|-----------------------|

Crosslet (Double bar and 6 uprights):

22. ANGLI.Z.F, single saltires, G4a.	Rev. 10, DIVTOR, G3. (BM)
23. ANGL.Z.F, " G4b.	" " "
24. AGLIE.Z.F, " " "	" DIVTO, G4a.
25. ANGLI.Z.FR, " " "	" DIVTOR, G3.
26. AGL.Z.FR, " " "	" " G4a.

This list presents some interesting features. Firstly we see that, on the obverses, the abbreviations of FRANCIE may have had some privy significance. With few exceptions the forms F, FR, and FRA are found grouped together. Similarly, the use of single and double saltires seems to have been purposeful, only the obverses with lettering G3a having the double form. On the reverses, however, the use of DIVTO and DIVTOR, though apparently purposeful, does not seem to observe any particular pattern. Secondly, though the obverse lettering preserves a regular sequence from G1 to G5 the reverses of the later crosslets are found equally with forms G3 or G4a.

To deal individually with the listed coins of the crosslet mark, there are first the very rare mules with the G.H. 2 mark. These are only known with crosslet obverses having the double-arched crown and the two forms of G.H. 2 reverses having lettering G, i.e. with cross-ends nos. 9 and 10, which, incidentally, fixes the position of these types as the first and last of their respective marks. Two crosslet dies were used in these mules, which are also the only known dies with lettering G2, that is with the curious R resembling a K. One of the two obverse dies has the curious spelling hENRIKIC for the king's name, the first R being normal and the second and subsequent R's of the broken type (Pl. XXI, 11). It seems possible that the incorrect use of an unbroken R was noticed after hENRI had been struck on an otherwise completed die, and the misspelling was the only way to avoid scrapping it. The other die reads hENKIC normally (Pl. XXI, 12). True groats from both these dies are also known, having lettering G2 and cross-end no. 10.

The above-noted two crosslet obverse dies have ANGL for ANGLIE. The more common obverses with the double-arched crown have the spelling AGLIE and new forms of N and R constituting lettering G3a. These groats are still scarce if not rare. A still rarer obverse with this lettering is the solitary die with the single-arched crown having the arch made of two bars and decorated with four crockets as jewels. This has the spelling AGL, and was apparently the first of the single-arch crosslet dies (Pl. XXI, 13).

Next in sequence come the common 4-croquet crosslets with the thick single bar to the arch of the crown. The earlier specimens of these have the same lettering as the preceding coins except that the F is now F3, and this variety has been called G3b. As there is no F in the reverse legend, the reverse lettering of these coins is identical to that on the 3a reverses, and both of these can therefore be called simply G3. The later obverses with this crown show a further modification in the lettering with the introduction of the unbroken E with pointed back (E6). This has been called G4a.

It will be seen that obverses with the spelling ANGLIE and ANGL are both known with lettering G3b and G4a. It is only on these crosslet groats that the full form of the word ANGLIE is found, and as it overlaps the use of the form ANGL, normally found in this position in the sequence, it may have been some special additional issue that was distinguished in this way.

With the new lettering G4 and the spelling AGLIE, and contemporary with the last coins of the preceding type, we have another rarity of these series, namely the die with the single arch having a double bar and six crockets as jewels (**Pl. XXI, 14**). The reverses found on the five groats noted from this die also have the new E6, and are therefore classed as G4. This was the first use of this lettering on reverses, and it will be seen that later coins continued for some time with G3 reverses.

Finally we come to the second common group of full-faced crosslet groats, viz. those with the single-arched crown having a double bar but six small uprights as jewels. The obverses with ANGLI are the only ones of this type having G4a, which fixes the position of this variety of spelling. The rest have the broken version of F2, a new R, and the broken I, which lettering has been called G4b. The ANGL and AGLIE groats still have the earlier G3 reverses, and only for the forms AGLI and AGL was the later style G4a employed. G4b was apparently never used on reverses. This last spelling AGL and the lettering G4a were used for the new profile groats which were replacing the full-faced series at this time.

CHAPTER V. *The Full-Face Half-Groats*

It should be needless to say that the Tower half-groats of Henry VII present nothing like the variety nor, of course, the problems of the groats. Owing to the greater difficulty of production and the smaller profits involved, it was always the practice of the mintmasters to strike the minimum number of smaller coins that they could get away with, in spite of the protests of the general public and the orders of king and Parliament. The position for the public would, in fact, have been most serious had it not been that, during most of this reign, the archbishops held minting rights up to the half-groat. The result was a comparatively large issue of halves from Canterbury with lesser amounts from York, helped at the latter city by small issues from the Royal mint there.

LONDON AND YORK. The output of the two royal establishments will be considered first:

Type I. A few very rare London halves exist (5 noted) with the true open crown found on the halves of earlier reigns, i.e. with circular openings below the jewels, not to be confused with the later open crown on coins with broken tressure. These rare halves have the lis on rose mark¹ on the obverse, saltire stops, cross-end no. 1, and lettering approximating to alphabet A of the groats. The face is the heavy broad-chinned type with the wide conventional curls also found on the rare halves of Richard III (**Pl. XXII, 1**).

Type IIIA. Several years must have passed before any further halves were issued from the Tower; at least none have survived corresponding to the later open-crown groats with mint-mark rose, nor to the plain double-arched-crown groats of the 'no-mint-mark' or heraldic cinquefoil series. The first halves with the double crown, having traces of jewellery on the outer arch,

¹ It is a true lis on rose, as most of the rose is visible.

are the very rare specimens with the escallop mark. On the obverse this mark is placed over the cross but most of the few coins known have been so clipped that it is invisible, and can only be seen before POSVI on the reverse, and not always then. They are definitely identifiable, however, by the unusual feature of rosettes at the tressure cusps, imitating the rare groat die of this mark already noted. They have trefoil stops like the escallop groats of the middle period, cross-ends similar to no. 3, and lettering also approximating to that of the contemporary groats (D). The bust, like that of the groats, is provided with less conventional features and hair, and this bust was retained on all subsequent full-face halves both of London and York, as well as of Canterbury (Pl. XXII, 2).

Type IIIb(a). Very shortly after this small issue of escallop halves and probably more or less coincidental with the opening of the royal mint at York, it was apparently decided to cease using the normal mint-marks and employ the lis alone for the half-groats. The first coins with this mark, struck both at the Tower and York castle, are similar to the rare escallop-mark halves and have trefoil stops, but nothing at the tressure cusps and often a lis on the breast. The lettering is still the D of the middle-period escallop groats. The reverses have the same cross-ends as type IIIA, but with a central lozenge enclosing a pellet, and the stops are trefoils or none, except in the case of the York coins which are usually found only with reverses of the following type IIIb(b) having the later lettering E1 and rosette stops in the outer circle (Pl. XXII, 3).

Type IIIb(b). The other and more common type of half-groat with arched crown, mm. lis, from the royal mints, has the rather more ornate letters of alphabet E1 and the rosette stops of the late escallop and early pansy groats. Both types (a) and (b) are rare from London, but more common from the York mint, and the latter are found more often with reverses of the next type IIIc(b).

Type IIIc. The last type of royal full-faced half-groat has the bust as before but the double arches have been removed leaving a large open crown breaking the tressure, with the lis mint-mark directly above it. The early coins of this type (IIIc(a)), which are known only from London, have the same style and size of lettering as the previous issue and rosette stops in the outer circle of the reverse only (Pl. XXII, 4). Shortly, however, the dies were made slightly smaller and the lettering considerably reduced in size (IIIc(b)), though remaining of the same style. The rosette stops now appeared also in the reverse inner circle. The reverses have the central lozenge and pellet and cross-ends as before. These latter coins are fairly common, both from London and York (Pl. XXII, 5), and mules with obverses of (a) and reverses of (b) are also frequently found. Broken letters are a feature of this type, as on the contemporary groats.

CANTERBURY. As already mentioned the most prolific and varied issue of half-groats was made from Canterbury during the episcopacy of Archbishop Morton who held the see from 1487 to 1500. The dies for these, like the York dies, were prepared at the Tower, but they differ in minor details of design

from the royal issues. They may be divided into two series: (1) the scarce early coins of types I and II, with mint-mark tun for Morton, and the reverse cross having M in the centre, and (2) the main issue consisting of type III. On these latter, the mint-marks employed on the obverses are the lis and tun, singly or in combination, with lis, tun, or nothing on the reverses, and these marks together with the changes in individual letter shapes and the privy marking by means of broken letters are the materials available for determining the sequence of dies. Unfortunately these halves have suffered very severely from the clipping evil,¹ and this, combined with the complication of mint-marks and broken letters, makes the task of classification rather difficult.

Type I. The first halves from Canterbury with mm. tun on obverse only, have the open crown, the first bust as on the London coins of this type, trefoil stops, and crosses by the neck, equivalent to the Tower groats of mint-mark rose. The reverses made for these first dies have either a trefoil after POSVI and before TAS (Pl. XXII, 6), or no stops, and, of course, the M in the centre of the cross. The obverses, however, are also found with reverses of the next type IIa. Both kinds are rare (Pl. XXII, 7).

Type II. Two closely related types of half-groat constitute this type, having no mint-mark, and crown with double arches, unjewelled. The busts and lettering are as type I, and they are undoubtedly contemporary with the 'no-mint-mark' groats. Type IIa has pellet stops, crosses by the neck, and an 'eye' after GRA, while the corresponding reverse has an eye after POSVI and saltire after DEVM (Pl. XXII, 8). It is this reverse which is occasionally found with an obverse of type I. Type IIb is similar, but has trefoil stops on the obverse, the crosses are in saltire form, and there is no eye after GRA. The reverse usually found with this type has the 'eye' before instead of after POSVI, but is otherwise identical with that of IIa, with the M in the centre of the cross. There are also mules of IIa/IIb.

Type III. These very common coins all have the bust with crown of two jewelled arches and the less conventional hair which is typical of the escallop and early pansy groats. The mint-marks, as already stated, are the tun and lis. For classification purposes they have been divided into four groups according to the stops and lettering, and especially according to the broken letters found on them.

In group A the obverses are apparently earlier than the reverses as they have lettering D (without the Roman M) and the trefoil stops of the middle period escallop groats, whereas the reverses found with them have lettering E1 and the rosette stops of the late escallops. It is on these reverses that we find the first broken letter, the T with right bottom serif removed; on the same reverses also occurs the curious R (R2a) with the leg turned in instead of out. This is found also on some London halves and on rare angels of the escallop mark but not on the groats (Pl. XXII, 9, 10).

Group B obverses are the first to show the lettering E1 and rosette stops, and the earliest of these also have the curious R. The tun mint-mark when not combined with the lis in this group is placed indifferently above or beside the

¹ A representative sample of 100 coins showed an average deficiency of $2\frac{1}{2}$ gr. = 10 per cent.

cross. Later it is invariably in the latter position. Broken letters now appear on the obverses as well as on the reverses. All these rosette-stopped coins are less common than the later no-stop issues (**Pl. XXII, 11**).

The halves of the third group, C, represent the most copious issue from Canterbury, and the normal coins without stops are very common indeed (**Pl. XXII, 12**). However, there are two sub-groups among them which are rare and very rare, namely those with saltire stops (**Pl. XXII, 13**) and the mystery coins with tun and pansy marks preceding the king's name. Of the latter, in fact, only four coins, all from the same obverse die (one in B.M.), have been traced (**Pl. XXII, 14**).

This unique appearance of one of the regular Tower marks on coins which would normally have been struck at Canterbury has been ingeniously explained by Mr. Carlyon-Britton. He suggests that it was employed to distinguish coins struck at the Tower from bullion which was awaiting coining at Canterbury when Archbishop Morton died in September 1500. It is true, of course, that the lis and not the pansy was being used on Tower half-groats at this time, but the lis had already been employed in conjunction with the tun at Canterbury, and would not, therefore, have sufficiently differentiated this special issue. If this explanation is correct, however, two premisses must be accepted:

1. That the pansy mark was current at the Tower in September 1500.
2. That the tun and pansy coins were the last full-faced issue at Canterbury.

Neither of these propositions can reasonably be maintained.

As for the first, it will be shown in the chapter on dating that it is almost certain that the pansy mark was superseded by the leopard's head crowned and the lis-issuant-from-rose at Michaelmas 1499 or a year before Morton's death. Actually, to prepare the new dies and coin the Canterbury bullion transported to the Tower after this event might well have taken another three months at least, extending the period necessary for the currency of the pansy mark to early in 1501, a time completely at variance with the evidence. But we have another and surer answer to the problem and this is found in the coins themselves.

Hitherto, except for one die reading AGLI and one or two reading ANG the English title has been invariably abbreviated to ANGL, which is the form found on the tun and pansy halves. There are, however, quite a number of halves showing the abbreviation AGL, and though about half of these have the normal characteristics of group C, the remainder obviously belong to a group of their own, later in sequence than any other Canterbury halves, and this has been called D. First, they show no broken letters on either obverses or reverses, if we except a possible broken bottom serif on the I. It will be noted in the summary that the F on the obverse and P on the reverse are broken throughout groups B and C; on these coins the two letters are perfect for the first time since the earliest rosette-stopped coins.

Second, though the letters on the obverses of these halves show little individual difference from the normal E2, on the reverses the O now has a central bar giving it the curious appearance of a serif-less E. But most decisive of all is the cross-end. Hitherto all the halves have shown a form

equivalent to no. 5 of the groats, that is with a swelling at the necks of each arm, and two horns at the ends enclosing a circle, typical of early and middle-period pansy groats. These halves of group D on the other hand have a cross-end identical with no. 7 of the late pansy and leopard's-head groats, that is with no swelling at the necks and the horns open, enclosing only part of the circle (**Pl. XXII, 15**). If it is remembered also that alterations of design are often found somewhat later on the halves than on the groats, there seems little doubt that these coins represent the output of the last year of Morton's episcopacy, and confirm that the pansy mark was superseded by the leopard's head and lis-issant-from-rose some time before his death.

Bearing in mind that each group of halves is distinguished by the lettering and stops and also by the broken letters found on obverse and reverse, the exact position in the die sequence of those with saltire stops and with the tun and pansy marks can easily be determined, viz. towards the end of group C, as shown on the summary which follows. This position is further confirmed by the reverses found with them. In the case of the eight specimens of the halves with saltire stops examined, the reverses are of types C8 and C10, while the four tun and pansy coins show reverses of B7 (one) and C10. It will be noted that none has a D-type reverse, i.e. with the latest type cross-end no. 7.

We are, of course, still left with the problem of what the extraordinary tun and pansy mark signified, but this is just another of those puzzles with which the hammered coinage abounds, and must await some inspired guess or documented solution in the future.

Here is a summary of the Canterbury half-groats; type III:

*Obverses**A. Lettering D, trefoils (M1/R1b)*

- | | |
|--------------------------|-------|
| 1. Lis | _____ |
| 2. Tun and lis | _____ |

B. Lettering EI, rosettes (R2)

- | | | |
|--------------------------|---------|--------|
| 3a. Tun over cross | } (R2a) | _____ |
| 3b. Tun beside cross | | |
| 4. Tun and lis | | C.D.F. |
| 5a. Tun over cross | } " " " | |
| 5b. Tun beside cross | | |

C. Lettering E2, no stops, ANGL (R3)

- | | |
|----------------------------------|--------|
| 6. Tun, rosettes (R2b) | G.H.F. |
| 7. Tun, no stops (R2b) | " |
| 8. Tun, " (R3) | " |
| 9. Tun, saltires | " |
| 10. Tun and Pansy | " |
| 11. Tun (AGL) | " |

D. Lettering E2, no stops, AGL

- | | |
|-------------------|-------|
| 12. Tun | _____ |
|-------------------|-------|

*Reverses**A. Lettering EI, rosettes (M2/R2)*

- | | |
|--|-------|
| 1. Lis, rosettes in i/c | _____ |
| 2. Lis, nothing in i/c (R2a) | A. |

B(a). Lettering EI, rosettes (M3/R2b)

- | | |
|-----------------------------------|--------|
| 3. Lis, rosettes in i/c | B.C.E. |
| 4. Lis, nothing in i/c | " |
| 5. No mint-mark | " |

B(b). Lettering EI, no stops (M3/R2b)

- | | |
|---------------------------|--------|
| 6. No mint-mark | G.H.E. |
| 7. Tun | " |

C. Lettering E2, no stops, cross-end 5 (M4/R3/T2)

- | | |
|-------------------------------|--------|
| 8. Tun (M3/R3/T2) } | G.H.E. |
| 9. Tun | } |
| 10. Tun . . . . . |  | I.E. |

D. Lettering E2, no stops, cross-end 7

- | | |
|-------------------|-------|
| 11. Tun | _____ |
|-------------------|-------|

(Broken letters indicated above:

A = T bottom right.

B = T both bottom serifs.

C = R bottom left.

D = H top.

E = P bottom right.

F = F bottom right of upright.

G = N top left.

H = E top right.

I = E bottom.)

KEY TO PLATES

PLATE XIX

CHAPTER I:

Type I:

1. Halved lis and rose/halved sun and rose (EJW ex RCB 1921).
2. Lis on rose 1/lis on rose 1 (EJW).
3. Lis on rose 2/lis on rose 2 (RCL 3193).
4. Lis on rose 3/lis reverse (BM).
5. Lis on rose 3/cross-fitchy reverse (EJW).
6. Lis on sun and rose both sides (EJW).
7. Lis on obverse (BM).
8. Cross fitchy, die 1/reverse I (EJW ex FAW 1913).
9. „ die 2/reverse II (EJW).
10. „ die 3/reverse III (EJW).
11. Rose/lis on rose (EJW).
12. Rose on obv. only, obv. as No. 11, reverse as No. 10 (WJP).
13. Rose both sides, curious double mark on obverse (BM).
14. Rose, star stops on obverse (EJW).

PLATE XX

CHAPTER II:

Type II:

1. No mint-mark, crown 1, star stops on reverse (WJP).
2. „ crown 2, trefoils by crown, pellet after ADIVTORE (EJW).
3. Heraldic cinquefoil, cross 1, pellet by cross/no mint-mark, pellet after ADIVTORE (EJW).
4. „ cross 2, 4 fleurs, no stops in i/c (BM).
5. „ „ 6 fleurs, trefoils in i/c (EJW).
6. „ „ 7 fleurs, „ (WJP).
7. „ Sovereign groat (Hunterian Collection).

CHAPTER III:

8. „ King's name in new letters (WJP).

Type II/IIIB:

9. Heraldic cinquefoil/Escallop mule (BM).

Type IIIA:

10. Heraldic cinquefoil (EJW).

Type IIIB:

11. Escallop, rosettes in spandrels (EJW).
12. Escallop/Pansy mule (EJW).
13. Pansy, crown 1 with pellet by cross (EJW).
14. Pansy, IIIB/IIIC mule (EJW).

PLATE XXI

Type IIIC:

1. Pansy, crown 3, reverse 6 (EJW).
2. „ crown 4, late mint-mark, reverse 7 (EJW).
3. Leopard's Head Crowned, special C and D (EJW).
4. Anchor, reverse 7 (EJW).
5. „ reverse 8, late plain letters (EJW).
6. Anchor on reverse only } Same obverse die. (AHB 1940).
7. G.H. 1 on reverse only } (EJW).

CHAPTER IV:

8. G.H. 1/G.H. 2, lettering E/F (EJW).
9. G.H. 2/Rose, special fleurs, lettering F/F (EJW).
10. G.H. 2 both sides, type IVB, lettering G/F (EJW).
11. Crosslet/G.H. 2 mule, hENRIKIC die (EJW).
12. „ hENKIC die (LAL).
13. Crosslet, double bar to crown, 4 crockets (EJW).
14. „ „ 6 crockets (EJW).

PLATE XXII

CHAPTER V (Half-Groats):

1. London, mm. Lis on rose (BM).
2. „ mm. Escallop, rosettes at cusps (EJW).
3. „ type IIIB(a), lis on breast (BM).
4. „ „ IIIC(a) (EJW).
5. York Royal, type IIIC(b), small letters (EJW).
6. Canterbury, type I, mm. Tun on obv. only (EJW).
7. „ mule I/II, mm. Tun on obv. only (RCL 3209).
8. „ type IIa, no mint-mark, eye after GRA, pellet stops (EJW).
9. „ type IIIA, mm. Lis both sides, trefoils/rosettes (BM).
10. „ „ mm. Tun and lis/Lis, „ (EJW).
11. „ type IIIB, mm. Tun and lis/Lis, rosettes b.s. (EJW).
12. „ type IIIC, mm. Tun both sides, no stops (EJW).
13. „ „ mm. Tun both sides, saltires/none (EJW).
14. „ „ mm. Tun and pansy/Tun (LAL-BM).
15. „ type IIID, mm. Tun both sides (WJP).
16. York Ecclesiastical, type 1 (EJW).
17. „ type 2, reverse 7 (EJW).
18. „ type 3/5, no keys, reverse 8 (BM).
19. „ type 3/6, „ reverse 10 (EJW).
20. „ type 6, reverse 10 (WJP).



1



8



2



9



3



10



4



11



5



12



6



13



7



14



THE TOWER GOLD OF CHARLES I

By H. SCHNEIDER

PART IV

THE ANGELS

THE medical interest and the historic background of the angels as touchpieces has been so remarkably well reviewed and so fully fathomed by Dr. Raymond Crawford¹ and Miss Helen Farquhar² that I was, at first, rather reluctant to deal with this series at all. For the angels of Charles I only touch the fringes of Tower gold coins issued for general circulation, and they were predominantly struck for the king's personal use as touchpieces. Nevertheless, they were coined under the terms of the official indenture and were unquestionably legal tender. That the output of angels was to some extent regulated according to the king's requirements of 'healing pieces' is by no means a novelty of the reign of Charles I. The angel as a coin began to go out of fashion after the death of Elizabeth I and we have evidence to the effect that James I had already found it necessary to give special orders to the Tower mint so as to ensure an adequate supply of coins for his touching ceremonies.³

That the medical profession should be interested in the ancient 'touching' tradition⁴ and accounts of miraculous cures is, of course, obvious. However, it is only from the reign of Henry VII onwards that doctors of medicine and numismatists join forces. For the presentation of a specific type of coin—an angel pierced for suspension—with which the king made the sign of the cross and hung it personally 'about the neck of the afflicted person' does not seem to go back to a period prior to the first Tudor king. The isolated earlier angel with a hole in it, or for that matter pierced coins other than angels, cannot be regarded as touchpieces *a priori* because of a perforation which may have been made for a variety of reasons and in some cases centuries after the coin was struck.

Angels pierced for use as touchpieces constitute almost the only instance where numismatic material has been systematically collected outside the sphere of numismatics and it is unfortunate but only natural that the 'medical collections' are mostly unknown and have therefore escaped investigation by students of numismatics. In this connexion I would like to place on record a special vote of thanks to the Noon family for their full collaboration and permission to have certain key coins cast—a procedure to which some other members of the medical profession might have objected. I am equally grateful to the Wellcome Historical Museum for the help I have received from their Director.

It seems futile to reproduce what would inevitably constitute a severely

¹ *The King's Evil*, 1911, embodying and amplifying the author's lectures at the Royal College of Physicians (Fitzpatrick Lectures).

² 'Royal Charities', *B.N.J.* vols. xii/xv.

³ Cf. Cockran-Patrick, 'Notes on some Original Documents relating to Touch-pieces', *N.C.* 4, vii. 122/3.

⁴ In England this appears to go back to the reign of Edward the Confessor who is alleged to have imported the custom from France.

condensed version of Miss Farquhar's and Dr. Crawford's publications which can be regarded as fairly final so far as the history of the touchpieces is concerned. Unlike the case of the other Tower gold denominations, we have one single and coherent paper covering the entire background of the angels of Charles I, Miss Farquhar's 'Royal Charities', and in order to avoid unnecessary duplication I would like to refer students to this. It constitutes perhaps Miss Farquhar's finest contribution to English numismatic literature. Quite clearly, she loved the subject and put heart and soul into it and I think that even readers who do not share her strong royalist sympathies will not object to some of her comments considering the outstanding quality of her research work.

Within the scope of their publications, neither Miss Farquhar nor Dr. Crawford was directly concerned with the purely technical aspect of the angel as a coin and it is therefore not surprising that they made no attempt at listing them and recording the features. To do this is almost my only contribution to Miss Farquhar's 'Royal Charities', for it is perhaps true to say that everything is known about the angel as a touchpiece but nothing of the angel as a coin.

In the domain of numismatics a few loose ends remain to be tied up. Kenyon's erroneous statement¹ that no angels were struck after 1634 appears to have been based solely on the fact that no specimen bearing a privy mark later than Portcullis was known to him in this series when he compiled the notes for his book. Miss Farquhar endorsed this statement with reservations in 1908² and interpreted it as meaning that 'the angel was not issued as currency after 1634'.³ Basically, she maintained this view in 1916⁴ but expressed the opinion that, after 1633 or 1634, the angel was coined for presentation 'almost' exclusively. No doubt, Miss Farquhar would have been more positive in her assertion had she known of unpierced angels struck after 1634 when she wrote her paper. But, like Kenyon, she did not consult the Hunter cabinet at Glasgow⁵ and all the other late unpierced angels seem to have been discovered after her paper was written, except perhaps Mr. Raynes's specimen⁶ with the Tun mark which was probably not available for research at that time. Today, angels without holes bearing privy marks Bell, Crown, Tun, and Anchor are known to be extant and it must therefore be assumed that a certain percentage of the Tower mint output was released for general circulation until about 1639. What happened afterwards is difficult to say. The figures quoted by Miss Farquhar⁷ seem to indicate that there was little or no scope for an issue of angels as normal currency considering the number of persons who were 'touched' by the king. But it is not only that: the political situation was rapidly deteriorating for Charles and the touching ceremony may already then have become a sort of pro-royalist demonstration.⁸ In these circumstances it is by no means impossible that the king reserved the

¹ *Gold Coins of England*, p. 150.

² *B.N.J.* v. 149.

³ After the sale of the Montagu collection Miss Farquhar was obviously aware of the existence of angels struck well after 1634. Cf. Montagu sale, Fifth Portion, Nov. 1897, Lots 333/4.

⁴ *B.N.J.* xii. 113/14.

⁵ Which contains an unpierced angel of Charles I bearing privy mark Crown.

⁶ Raynes sale, Glendining's, Feb. 1950, Lot 222.

⁷ *B.N.J.* xii. 130/1.

⁸ *B.N.J.* xii. 119.

entire output of angels for 'healing' purposes and that the coins were no longer released to the public. In any case, no unpierced angels of Charles I bearing a privy mark later than Anchor of 1638/9 have so far been recorded.

We have irrefutable evidence that the angel coinage came to an end not later than 25 November 1642,¹ but it seems likely that the striking of angels was, in fact, already discontinued in August 1642, after the king had lost control over the Tower mint establishment.

So far as the piercing of the coins is concerned, the view is almost universally held that care was always taken not to damage the archangel's head when the angels were holed for use as a touchpiece. In the Stuart series this is a myth to which no further currency should be given. Of the seven pierced angels of James I in the British Museum trays, five have the hole punched right through St. Michael's head. Of eleven specimens inspected at the dealers seven showed the archangel's head partly or completely removed by piercing. During the reign of James I it seems to have been almost the rule to pierce the coins through the angel's head, but this is not the case for the corresponding coins of Charles I. I have only recorded seven angels of Charles I so pierced² from various sources, but this represents nevertheless about 10 per cent. of the coins which have gone through my hands.

There seems to be simply no rhyme or reason for the manner in which the angels of Charles I were pierced. It is admitted, of course, that several specimens have the dragon's head punched out but this may be purely accidental or the practice of an isolated goldsmith. It was no more a common practice than to perforate the coins at 6 o'clock which was allegedly done so that the patient could see the figure of St. Michael downwards on the angel when wearing his touchpiece. A comparatively large number of specimens were pierced at about 4 o'clock or 8 o'clock but this has presumably no special significance. For it is rather an obvious place for perforation, probably selected for no other reason than to leave the essential features of the obverse design undamaged. But here again it was by no means a rule which was systematically applied or even observed in the majority of cases.

In regard to the perforation itself, we find piercings of all types and sizes: anything from a minute little hole—more often than not drilled through the coin in an amateurish fashion and with a tool not particularly well suited for the purpose—to a very large and perfectly round perforation clearly made with a punching device. Generally speaking, the early angels of Charles I have small holes as is also the case for the angels of James I and the Tudor kings and queens. This points towards the use of a thin silk string rather than a ribbon for suspension. The ribbon and the large hole are apparently a seventeenth-century novelty which is difficult to date. It may well have been adopted during the second half of Charles's reign, but it must be remembered that Charles II used angels of his ancestors³ before his own touchpieces were made and in extreme cases there may be a century or more between the striking and the perforation of certain angels. In these circumstances, an attempt

¹ Cf. 'The Gold Coinage of Charles I' by Mr. H. Symonds. *N.C.* 4, xiv. 264/5.

² Two specimens in B.M., a further three specimens recorded from the stock of the dealers, one specimen in a private collection on the Continent, and Taffs sale, Glendining's, 21 Nov. 1956, Lot 21.

³ Cf. *B.N.J.* xiii. 118 and 122.

at dating any given perforation is futile, *a priori*. For that matter, it can be taken for granted that Charles I himself used angels of his predecessors after 1642 when the Tower mint ceased to supply him with the coins he needed to 'touch' for the King's Evil.¹

According to the documentary evidence, silk strings and ribbons were used side by side down to the reign of Charles II² and this is fully confirmed by the size of the hole of the touchpiece which that king caused to be struck. The large hole was no doubt expedient for the sergeant-surgeon whose duty it was to prepare the coins for the royal touch, but there are other very plausible explanations for it. Sir John Evans has already suggested³ that the piece of gold which was punched out of the angel became the property of the goldsmith who performed at the touching ceremony and that this explained the large diameter of the hole. Since very little work and no skill was required to make the perforation, this was a surprisingly good remuneration. For considering the size of the large type of 'official' hole, the gold weight retained from some 35/40 angels would have represented the equivalent of over a fortnight's labour in husbandry at that time, or, for that matter, three days' salary of a fully qualified senior engraver at the Royal Mint.

Within the scope of this paper I am not concerned with some of the other and most debatable assertions Sir John Evans made in his article on the subject of touchpieces, but so far as the size of the perforation hole on the angels of Charles I goes his views can be substantiated to a very large extent. Several angels are known with two large and undamaged 'official' piercings and it is almost inescapable that the second perforation was made when the patient received a further 'touch'. If an additional piece of gold was punched out of the coin on an official occasion, one must assume that the goldsmith had a recognized right to the cutting.

It has been suggested that official orders were given to the Tower mint to supply angels specially pierced for use as touchpieces.⁴ The apparently widespread contention that this was done—at any rate during the later stages of the reign of Charles I—is perhaps largely due to the fact that the dealers use the term 'official piercing'. But this refers solely to the large hole cut out of the coin with a mechanical punching device by a goldsmith prior to the touching ceremony. It has thus an official character and the dealers' term is perfectly admissible. They have never suggested at any time that the 'official' piercing of the angels was made at the Tower mint. There is absolutely no evidence whatsoever for this and a closer inspection of the holes makes such an assumption very unlikely. For the diameter even of the 'official' piercing varies considerably. This is quite consistent with the work of different goldsmiths performing on various occasions and in various localities and using their own tools but can hardly be reconciled with a routine perforation in the Tower mint which would be likely to have been made in a standardized manner and with the same punching apparatus.

That the touchpieces of Charles I became objects of veneration to a much

¹ *B.N.J.* xii. 114.

² *B.N.J.* xiii. 104.

³ *N.C. N.S.*, xii. 193.

⁴ *B.N.J.* v. 149. Here Miss Farquhar quotes as authority an article published by Mr. Cockran-Patrick in *N.C.* 4, vii. However, this deals predominantly with the reign of James I and contains no reference whatsoever to the piercing of angels.

greater extent than those of his predecessors and that they were more carefully preserved, is understandable. For the royalists they represented an important article of sentimental value, handled personally by 'His Sacred Majesty', 'The Good King', and 'The Martyr', and because of this the angels of Charles I are not nearly as rare as the small output would lead us to assume and as they are frequently stated to be. Actually, the angels of Charles are hardly rarer than those of his father although the angel coinage of James I was about two-and-a-half times greater. Altogether sixty-eight angels of Charles I have gone through my hands and specimens keep on turning up out of drawers and jewel boxes rather than hoards or small collections. I should not be surprised if the number of these coins which have come down to us were to reach three figures. This is quite an exceptional percentage of the number of angels struck, for during the entire reign of Charles I only some 285 lb. of angel gold was minted. Mr. H. Symonds published the following particulars from the records of the pyx trials in the *Numismatic Chronicle* of 1914:

<i>Date of trial</i>	<i>Mint-mark</i>	<i>Amount of 23 c. 3½ gr. gold in pyx (angels)</i>	<i>Amount of 22 c. gold in pyx (unites, double crowns, and Britain crowns)</i>
29 June 1626	Fleur-de-lys	£ s. 1 0	£ 613
27 April 1627	Blackmoor's Head	1 10	122
" " ¹	Long Cross (second pyx)	10	291
3 July 1628	Castle	8 10	375
26 June 1629	Anchor	6 0	178
23 June 1630	Heart	3 10	335
30 June 1631	Feathers	1 10	374
21 June 1632	Rose	4 0	170
11 July 1633	Harp	6 0	141
27 June 1634	Portcullis	3 10	98
18 June 1635	Bell	3 10	110
14 Feb. 1636	Crown	nil	28
" " ²	" (second pyx)	3 10	176
8 May 1638	Tun	3 10	102
4 July 1639	Anchor	3 0	113
26 June 1640	Triangle	4 0	41
15 July 1641	Star	3 10	92
29 May 1643	Triangle in a circle	1 10	143

Actually, £12,658 of angel gold was coined in the Tower mint between 1625 and 1642 as against the impressive figure of £2,822,151 of 22-carat gold for the period covering the years 1625-41. If the same standards were to be applied to angel gold and crown gold, the sources which yielded nearly 70 angels out of some 25,000 specimens struck should have produced a number of unites, double crowns, and gold crowns running into five figures even if we take into account that the bulk of the crown gold coinage consisted of unites. In fact, these sources provided only some 1,650 specimens with privy marks

¹ 'The two pyxes were due to a change of officers, not to an alteration in the coins. The Long Cross coins must have been earlier than those with Blackmoor's Head, although the former were in the second pyx.'

² 'Caused by the same reason as in 1627 (see note, *supra*)'.

prior to (P) and Part I/III of my paper is based on the evidence of roughly 900 unites, 390 double crowns, and 360 gold crowns.

For the angels of Charles I, I have listed and numbered the dies and followed them through their various stages of alteration. To publish a similar record for the unites and their fractions would have increased the volume of this paper beyond all practicable and reasonable limits and hardly anything of value would have been added to our knowledge. Over and above that, the crown gold series are so prolific that I could hardly have established a pattern of die links complete enough to obtain a coherent and relevant picture of the use of the dies. This was, however, possible in the case of the angels and we find here what is almost certainly the most extraordinary combination of die links in the post-medieval gold coinage of England. As my drawings¹ and the General List of the coins show, there are a few obvious gaps in the chain of die links and several additional combinations may well have existed. But the overall picture is fairly complete and the number of probable additions not very great.

The use of the same dies during more than one privy-mark period was of course to be expected for a very small coinage during which the Tower mint was notoriously short of funds and economized on irons. In fact we find frequent cases of dies which have borne three or more different privy marks, and yet I have recorded over 20 obverse and over 20 reverse dies to strike no more than some 25,000 coins. Since we must allow for the existence of a few more dies than those I have listed, we arrive at the astonishingly low average of about 1,000 angels per pair of dies and possibly less. This is hardly 5 per cent. of the normal output of irons of this size for the period, and it would perhaps be useful to review other rather puzzling anomalies which we encounter in connexion with the angel dies of Charles I.

1. I have already referred to the exceptionally large number of specimens which have come down to us from so small a coinage and suggested that this was probably due to the sentimental value of the coins. It will perhaps be felt that my explanation accounts for some, but not for all, of the discrepancy with normal standards of coin survival and it is admitted that the difference is indeed suspiciously great.

2. In accordance with the mint regulations one angel for every 15 lb. of bullion coined should have been placed in the pyx boxes. Mr. Symonds's figures² show, however, that no less than £58. 10s. or 117 angels were deposited in the pyx boxes during the reign of Charles I and if we multiply this figure by 15 lb. we arrive at an angel coinage of 1,755 lb. as against the official return of 285 lb. However, these amounts can obviously not be worked out in a strictly mathematical manner. Miss Farquhar was no doubt right in suggesting that 'an angel must have been put into the pyx however small the parcel of gold coined'³ and we should also allow for the fact that if, say, 17 lb. of angel gold were minted, two specimens were presumably placed in the pyx boxes. In these circumstances we cannot expect to find the theoretically correct pyx figure of 19 angels in respect of 285 lb. of angel gold. However, considering that there were 17 privy marks for the angels, the theoretical

¹ On p. 311.

² Cf. *supra*, p. 306.

³ *B.N.J.* xii. 133.

maximum of 36 specimens in the pyx should not have been reached and certainly not have been exceeded, had the normal rules been observed. If we make the same allowances for the purely hypothetical amount of 1,755 lb. of angel gold mentioned above, we would have to reduce this to about 1,500 lb. of bullion which would have yielded 133,700 coins and over 5,000 per pair of dies. I am not suggesting that this is the true figure. I am simply stating facts.

3. For the three crown gold denominations struck during the corresponding period, coins to the value of £3,502 were placed in the pyx box in respect of an output of coins totalling £2,822,000. Since we do not know how this amount was split up into unites, double crowns, and gold crowns we cannot arrive at a close approximation, but considering the comparative rarity of each denomination the normal pyx rules seem to have been adhered to. It is therefore strange that during the same reign coins of the fine standard gold should have been treated quite differently and the formidable discrepancy has already puzzled Miss Farquhar who quoted as an example the pyx trial of the Portcullis mark period.¹ She pointed out that in respect of 21 lb. of fine gold one should not have found 7 angels in the pyx because £3. 10s. represented the equivalent of 105 lb. of bullion minted. However, Miss Farquhar was not concerned with the number of dies which had been used to strike the angels of Charles I and she was no doubt unaware that a pair of dies appears to have struck only a thousand coins, so that the anomaly troubled her less than it disturbs me.

4. Miss Farquhar referred to several instances when the number of admission tickets to the 'touching' ceremonies exceeded the number of angels struck during the corresponding period.² She suggested that 'either a certain unused surplus existed from previous years, or else some angels were purchased from goldsmiths'. This is of course possible but, so far as a problematical 'unused surplus' is concerned, we must allow for a certain number of coins which were released for general circulation, and that angels should have been bought from the goldsmiths seems rather unlikely. It would have been cheaper and more convenient to strike them at the Tower.

5. There are frequent references to angels having been released to the keeper of the king's Privy Purse³ and it is disturbing that the amounts paid to him 'for healing' persistently exceeded the bullion weight of the official angel coinage of the same period. However, we have no complete record for the years 1625-42 and we must accept Miss Farquhar's view that 'it is perhaps unprofitable to go into these minutiae, for unless we had a complete table of all the years of Charles I's reign we could arrive at no definite approximation'. With this I am fully agreed and my suspicion that private bullion from the king's Privy Purse was handed to the Tower mint and coined into angels without having been included in the official returns is entirely conjectural. Such a practice would have been quite irregular but I feel that we cannot ignore a fair amount of evidence which seems to point in this direction. The number of angel dies which I have been able to record is simply out of all

¹ *B.N.J.* xii. 133.

² *B.N.J.* xii. 130/1.

³ *B.N.J.* xii. 130/1 and 133/4.

proportion for so small an amount of bullion coined and dies were never wasted or scrapped at the Tower without a reason—least of all during the reign of Charles I when strict economy measures were applied. That the dies should have been worn out and become unserviceable after an average of about 1,000 strikings is quite unbelievable and this anomaly does, I think, call for an explanation.

It is also strange at first sight that there should be an almost equal number of obverse and reverse dies for the angels of Charles I. Because in the case of the portrait coins we find that there are about two reverse dies for one obverse. The obverse irons were, of course, more expensive to produce, for the king's portrait punches were invariably made by a highly skilled and highly paid chief engraver—as a rule by Briot or Greene. To cut reverse dies, however, was more or less mathematical routine work which was usually done by an under-engraver and to make the punches required no great talent. In these circumstances it is not surprising that the obverse dies were given the privileged position in the striking process so that the reverse dies had to take most of the brunt and their breakage was accordingly higher. But it would appear that no special precautions were taken for the obverse dies of the angels of Charles I and that is perhaps not altogether surprising. The obverse design of the angel was completely standardized and to make the master punches for the figure of St. Michael and the dragon required no greater technical or artistic qualifications than to produce the tools for the ship on the reverse dies. It seems therefore quite possible that no discrimination between obverse and reverse dies was made when the angels were struck and that breakage was thus about the same for both.

The Coins

The obverse design of the angel, which had remained unchanged for well over a hundred years, was slightly altered when Charles I became king and the dragon was made to conform with the traditional French model. The dragon is, in fact, a wyvern with only two legs instead of four—a design which had been used for all the early English angels until it was modified during the reign of Henry VII—and its tail ends in a pheon. It is perhaps noteworthy that the very first angel of Edward IV shows a wyvern with a tail ending in a second head¹ and that the last series of English angels have pheon-tails, whereas all the others have plain ones. However, the alteration of the design does not affect the general aspect of the coins to an appreciable extent.

On the reverse the more elaborate ship model, which was first introduced on the angels of James I after 1619, was maintained. Since all the recorded dies are illustrated and no change of design took place during the reign of Charles I, it would serve no useful purpose to comment on the punches.

The Dies

I have recorded 23 obverse and 21 reverse dies. They were numbered in their initial stage and I added the letters *a*, *b*, *c*, and *d* in accordance with the

¹ Cf. *B.N.J.* xxvi. 221.

it is quite possible that 0-23 is in fact 0-18*b* and this would of course make 0-23*a*, 0-18*c*. If this is the case, I would like to make the same reservations for the 0-18*a* stage of this die which I made in respect of 0-17*b* above.¹

So far as the reverse dies are concerned, the privy mark was placed at the beginning of the legend only in the very early stages of the angel coinage of Charles I. We find it so placed on R-1/R-1*a* and R-2/R-2*a* and it would appear that its position was changed to the end of the legend on the reverse dies after the end of the Cross Calvary period when the mark of value X was introduced on the obverse dies. However, since it seems that there must always be an exception to the rule, the Triangle-in-Circle mark suddenly appears again at the beginning of the reverse legend on R-20/R-20*a*.

Much the same applies to the emblems on the poop of the ship. Only the first three reverse dies have a Lion and all the others a Lis, the latter frequently surrounded by two or four gun ports. The exception here is reverse die R-18 on which the Lion reappears on the ship.

Nothing need be said about individual reverse dies except perhaps in connexion with the spelling mistake on R-14 which reads REGIS. Strangely enough an engraver altered it to REGES on R-14*a* when the error was noticed instead of changing it correctly to REGIS.

It is surprising that no angels with privy marks Feathers and Star have so far been recorded because both have a fairly normal pyx figure and Star should not even be particularly rare. That such coins were struck is certain but the two privy marks in question are only known from overstrikes.

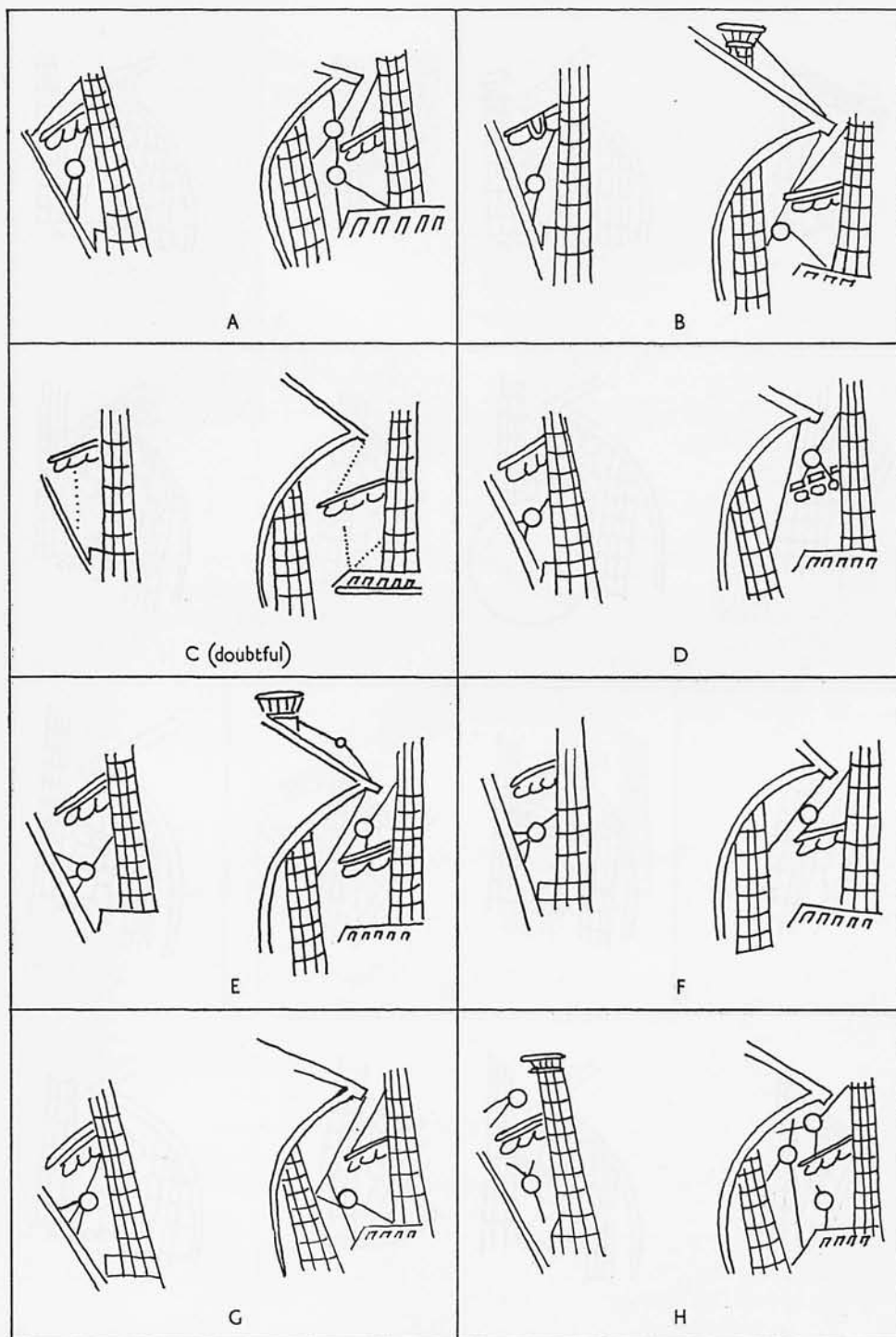
The Rigging

It will perhaps be thought that I have assigned an undue importance to the rigging of the ship which has no special numismatic significance. I believe, however, that students and collectors alike will find the complete set of drawings useful because they allow an immediate and easy identification of the reverse die. Actually, the rigging is never identical on any two reverse dies I have recorded, and in this series, where overstrikes frequently produce privy marks of doubtful shape and where important parts of the coins are often cut out when the piercing was made, the identification without reference to the rigging is sometimes a long and tiresome undertaking.

In most cases the rigging was drawn from several coins struck from the same die and it is thus as complete as possible, more complete in fact than it appears on many individual coins, for the angels were carelessly struck in the majority of cases and the thin lines of the ropes did not always rise properly under the hammer. It will be noticed that, here and there, a block is suspended in an impossible manner and that a rope is clearly missing. After having discussed this problem with Mr. J. D. A. Thompson of the Ashmolean Museum who is an expert on this subject, I have decided not to add any ropes which are not visible on the coins. The manner in which the rigging is arranged on the angels is by no means always orthodox from a nautical point of view and it is quite evident that the Tower mint engravers knew considerably less about the correct rigging of an early-seventeenth-century ship than Mr. Thompson

¹ Cf. *supra*, p. 310.

SHIP'S RIGGING ON THE ANGELS OF CHARLES I. (1)







1



8



2



9



3



10



4



11



5



12



6



13



7



14







1



8



2



9



3



10



4



11



5



12



6



13

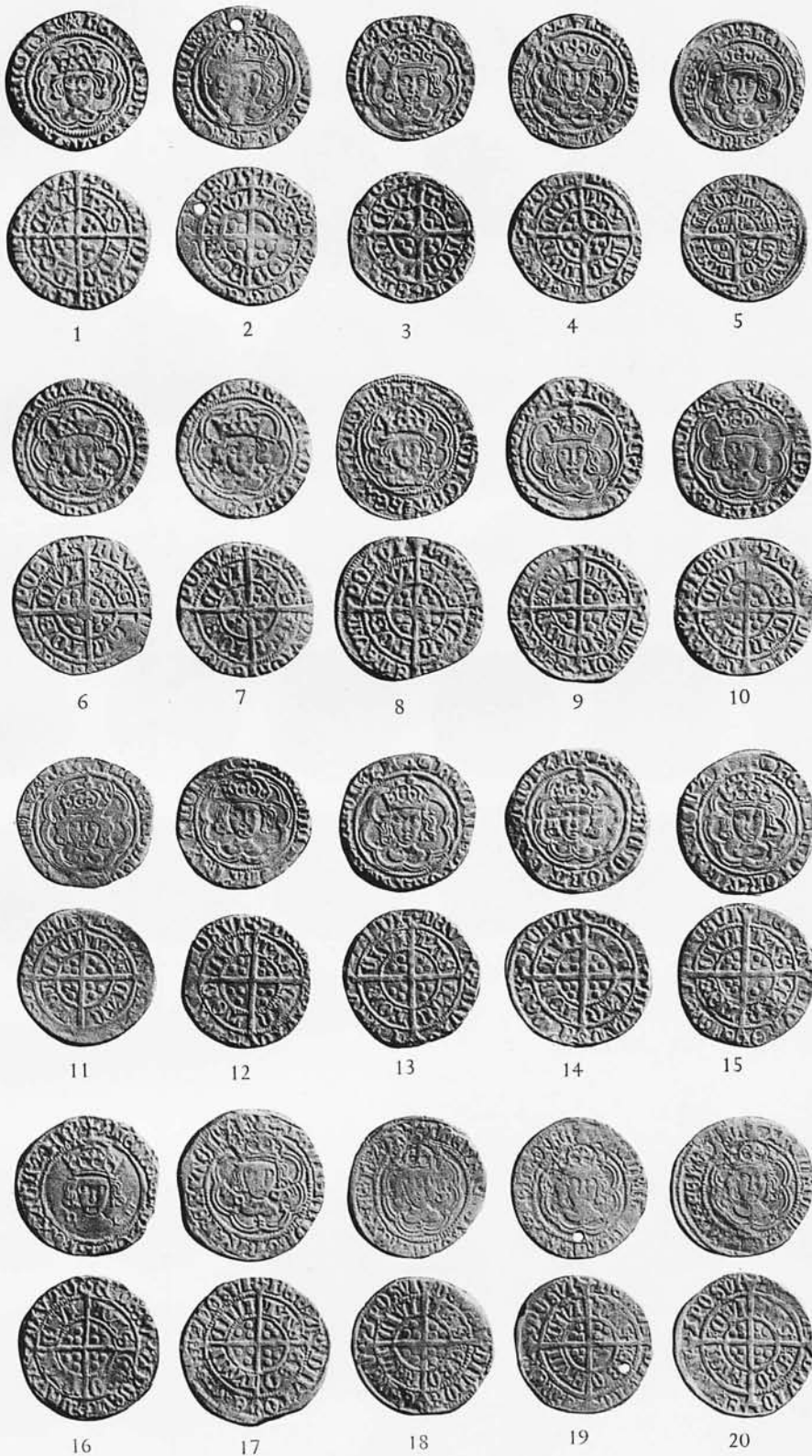


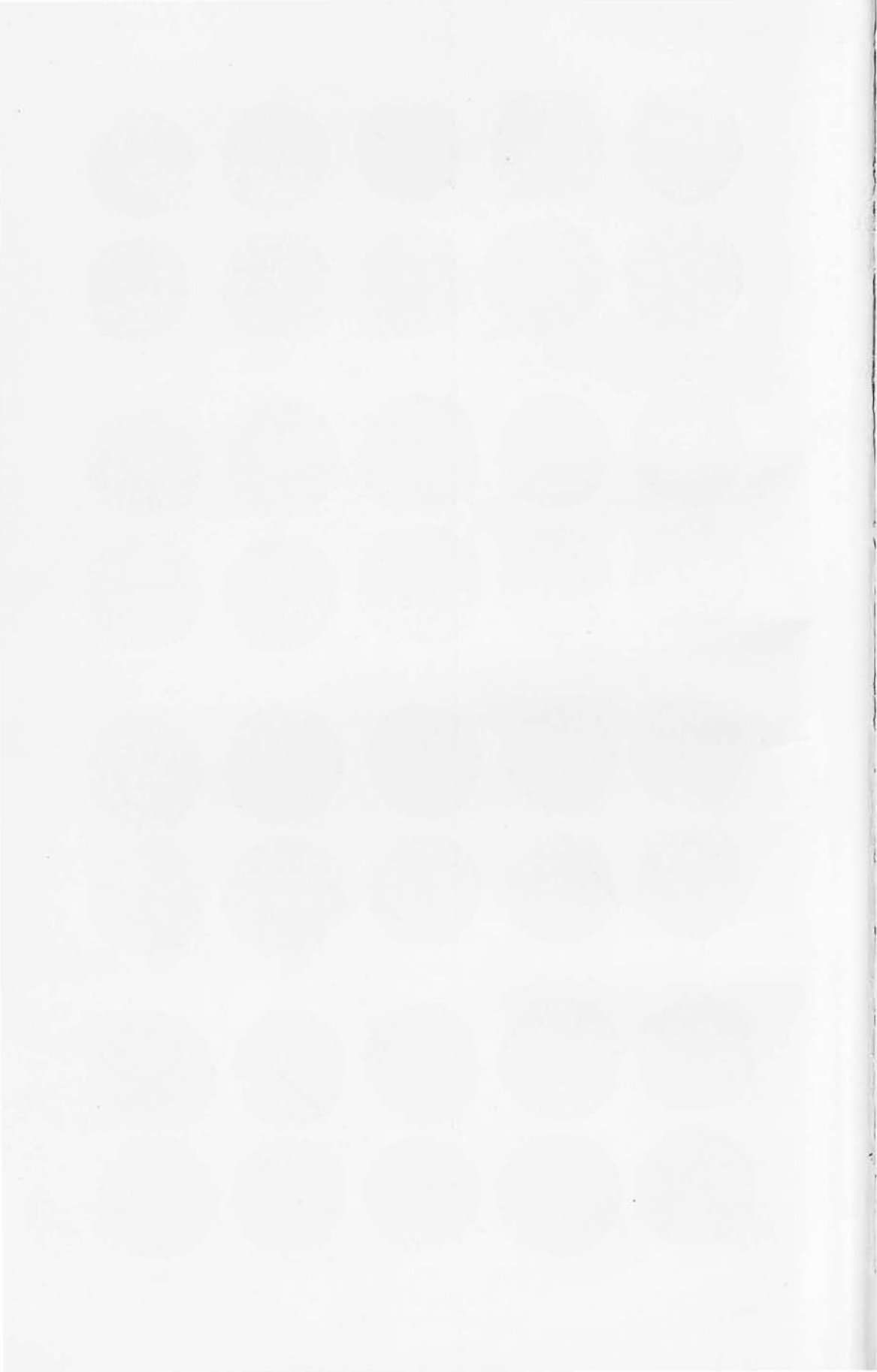
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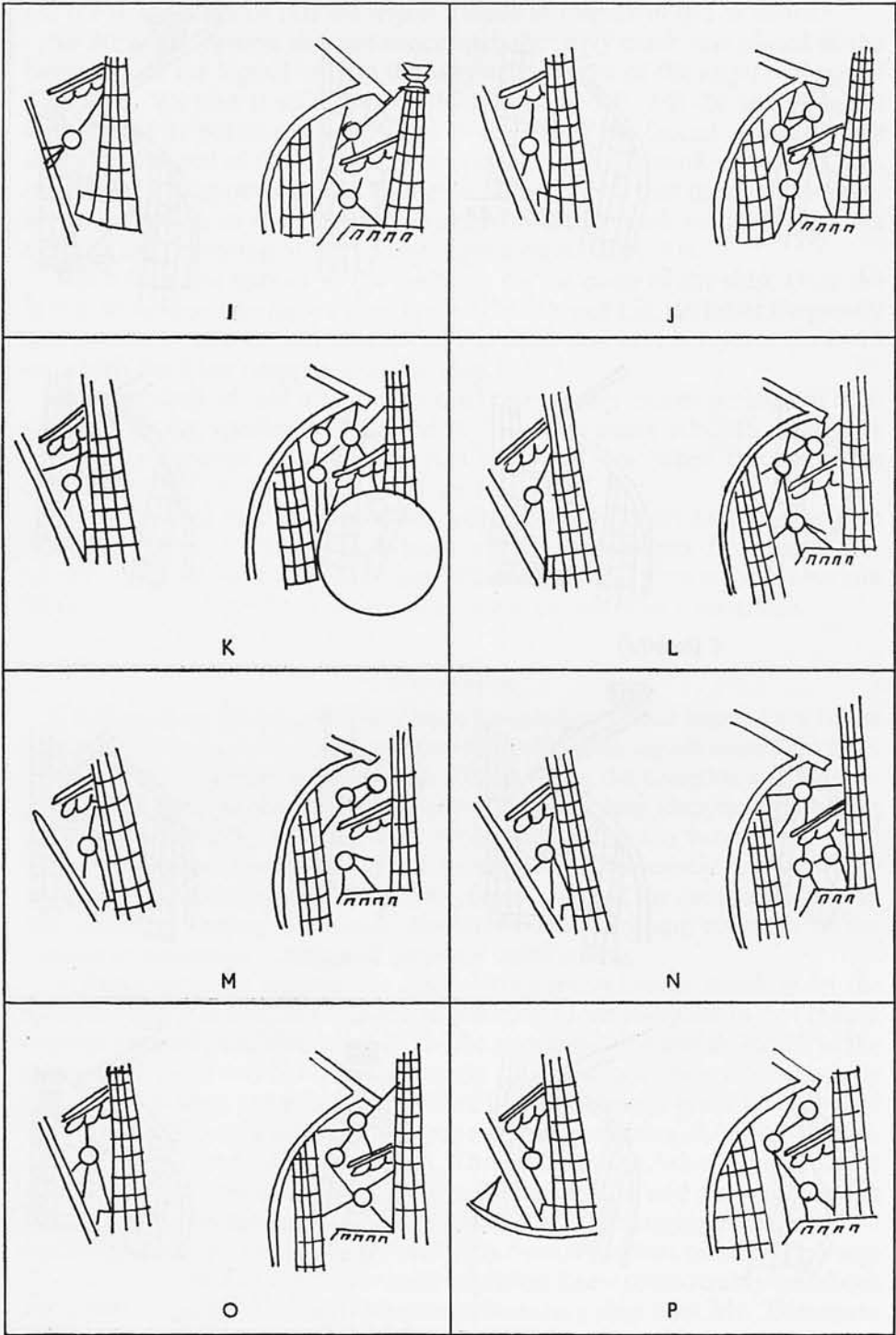
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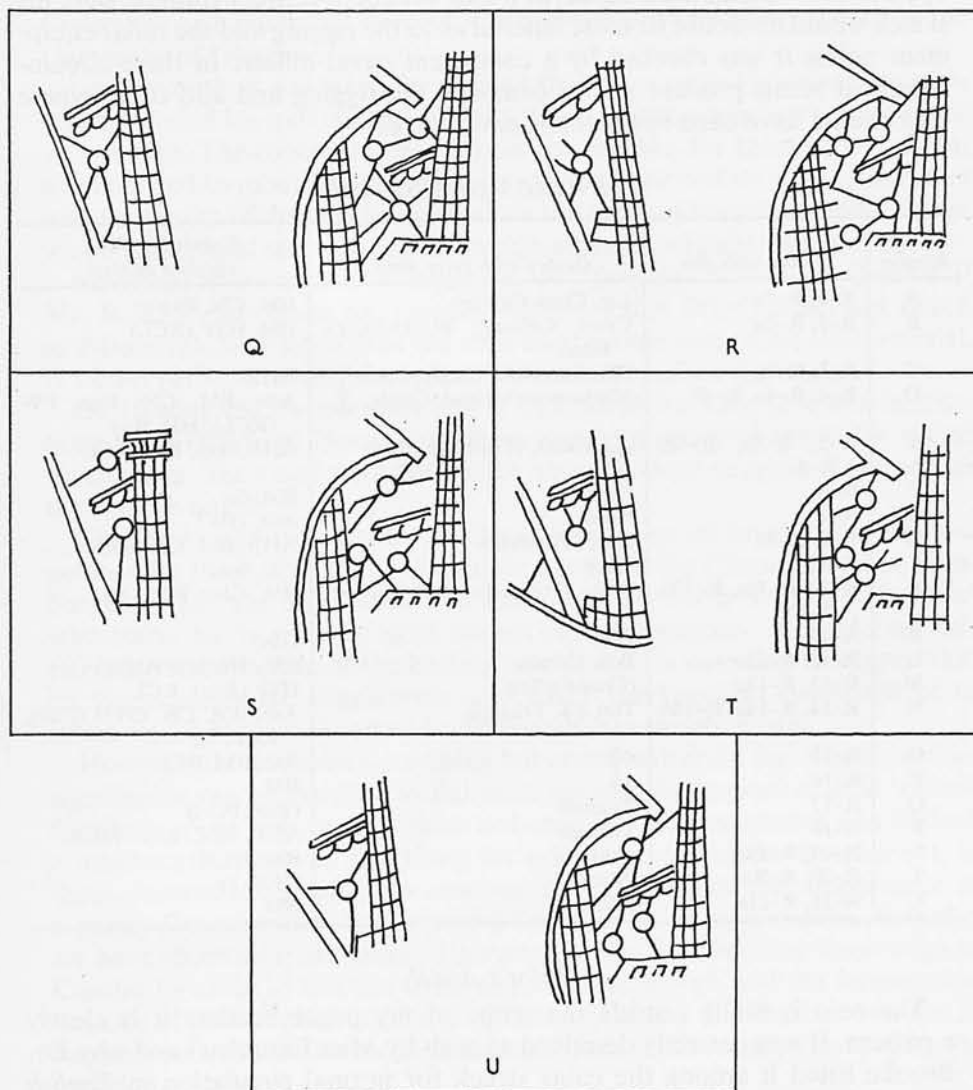




SHIP'S RIGGING ON THE ANGELS OF CHARLES I. (2)











SHIP'S RIGGING ON THE ANGELS OF CHARLES I. (3)



knows today. This is not altogether surprising. If a modern artist were called upon to draw a simplified model of a mid-twentieth-century training ship, his sketch would no doubt be most fanciful as to the rigging and the radar equipment unless it was checked by a competent naval officer. In these circumstances it seems prudent not to complete the rigging and add ropes where they should have been but perhaps never were.

DRAWINGS OF RIGGING

<i>Rigging</i>	<i>Occurs with dies</i>	<i>Occurs with privy marks</i>	<i>Drawn from and checked against</i>
A	R-1, R-1a	Lis, Cross Calvary	BM, CN, Ray
B	R-2, R-2a	Cross Calvary, Blackamoor's Head	BM, HSF (RCL)
C	R-3, R-3a	(Blackamoor's Head) Castle	AHB
D	R-4, R-4a, R-4b	Blackamoor's Head, Castle, 	Ash, BM, CN, Fitz, FW (RCL), HH, Ray
E	R-5, R-5a, R-5b, R-5c	 , Heart, (Feathers), Rose	AHB, Ash, BM, RCL
F	R-6	Heart	BM, Sp
G	R-7	Rose	Ash, HWT
H	R-8, R-8a	Harp, Portcullis	AHB, BM, CN, Soth
I	R-9	Harp	Fitz, Sp
J	R-10, R-10a, R-10b, R-10c	Harp, (Portcullis), Bell, Crown	BM, Glen, RCL, Sp
K	R-11	Bell	Glen
L	R-12, R-12a	Bell, Crown	BM, Hunt, WHMM
M	R-13, R-13a	(Crown), Tun	HSF (Ray), RCL
N	R-14, R-14a, R-14b	Tun,  , Triangle	Ash, BM, CN, GVD (Cun), RCL, Sp
O	R-15		Ash, BM, RCL
P	R-16		BM
Q	R-17	Triangle	Glen, PC-B
R	R-18	Triangle	AHB, BM, Ray, VJER
S	R-19, R-19a	(Star), 	BM, HLF
T	R-20, R-20a	(Star), 	HFV, Sp
U	R-21, R-21a	(Star), 	BM

Briot's Angel

The coin is really outside the scope of my paper because it is clearly a pattern. It was correctly described as such by Miss Farquhar¹ and why Dr. Brooke listed it among the coins struck for normal circulation in *English Coins* is difficult to understand. Strangely enough, Mr. Whitton did not correct this when he prepared the addenda and corrigenda to Dr. Brooke's book.

Briot's angel differs completely from the traditional model and constitutes, as it were, an attempt at conforming the design to the style and taste of the early-seventeenth century. As one would expect the dies were beautifully engraved and it is certainly an excellent artistic achievement but it lacks, I think, the forcefulness of the original design. On the reverse, the man-of-war is quite differently represented as well: the mainsail with the royal arms is better and more realistically drawn, and 13 large guns distributed over two decks appear on the side of the ship.

The British Museum angel by Briot is invariably described as unique. This

¹ *B.N.J.* xii. 135.

is erroneous: another specimen from the same pair of dies, pierced for use as a touchpiece, is illustrated on **Pl. XVII**. It is in the trays of the Hunterian Collection and published here by courtesy of the University Court of the University of Glasgow.

Until recently it was taken for granted that Briot made his pattern angel in preparation of his mill coinage of 1631/2 and that the coin was struck at the Tower mint. The conclusion was almost inescapable, for Briot's royal patent was confined to modelling the king's portrait and he had no right to interfere with the design of the angel except within the scope of his private mill coinage which had official sanction and for which a special warrant was granted.

However, in an excellent paper on the 'Stirling' turners of Charles I¹ Mr. R. B. K. Stevenson has recently suggested that Briot's angel was struck in Edinburgh, and since then the coin has become somewhat controversial. It would perhaps be useful to place the evidence before the reader.

On 10 May 1633 when Briot was in Edinburgh the king gave him instructions from Holyrood House to strike a certain number of angels for use as touchpieces. The coins were ordered to have the same design and fineness as the English angels.

Charles I 'performed the ridiculous ceremony of touching a hundred persons for the King's Evil', as Guthrie put it,² at the Chapel Royal at Edinburgh on 24 June 1633. Guthrie's authority for this is Sir James Balfour³ who refers to 'a piece of gold coined for the purpose'. Considering this reference and the date of the healing ceremony it is tempting to suggest that on this occasion the angels were used which the king had ordered Briot to strike on 10 May 1633, and Mr. Stevenson has clearly a case.

However, the evidence is anything but conclusive and I feel that no special significance can be assigned to Balfour's remark that a piece of gold 'coined for the purpose' was used. It must be borne in mind that neither was Balfour a numismatist nor was he writing for a numismatic public. One cannot, in these circumstances, jump to conclusions and attribute any importance to a purely factual remark not intended for students of numismatics. Actually, we have absolutely no reason to assume that Balfour had any knowledge of Charles I's order to Briot to strike angels at Edinburgh and the formulation 'a piece of gold' rather than 'a golden angel' shows that Balfour was not in the least concerned with the numismatic aspect of the touchpiece used on the occasion.

That the king's instructions to strike angels in Scotland were actually carried out cannot be taken for granted. Briot must have been extremely busy with his routine work at Edinburgh at this time and it seems probable that he left Scotland even before the touching ceremony at the Chapel Royal took place. Could he have found time to make the models for an entirely new obverse and reverse design of the angel, produce the punches, and cut the dies in so short a time? And cut them with painstaking care down to the last detail? In particular the ship with the elaborate rigging is a real *tour de force* from a technical point of view and a typical example of Briot's unsurpassed

¹ *B.N.J.* xxix. 133.

² *General History of Scotland*, ix. 213.

³ *Historical Works*, ii, 1824, 201.

THE ANGELS OF CHARLES I
OBVERSES

<i>Privy marks</i>	<i>Die number</i>	<i>By Dragon's Tail</i>	<i>By Dragon's Head</i>		<i>Occurs with reverse die</i>	<i>Remarks</i>
Lis . . .	0-1	—	—	CAROLVS·D·G·MAG: BRI·FR·ET·HI·REX	R-1	In Raynes sale (Glen 16-2-1950) an angel reading FRA was listed (Lot 219). This was a recording error. The coin reads FR and was struck from 0-1/R-1.
Cross Calvary .	0-1a	—	—	CAROLVS·D·G·MAG: BRI·FR·ET·HI·REX	R-1a, R-2	Privy mark Lis removed and replaced by Cross Calvary.
Blackamoor's Head	0-1b	×	—	CAROLVS·D·G·MAG: BRI·FR·ET·HI·REX	R-2a	Previous privy mark removed and replaced by Blackamoor's Head. Mark of value X added above Dragon's tail.
	0-2	—	×	CAROLVS·D·G·MAG· BRI·FRA·ET·HIB·REX	R-4	
Castle and Blackamoor's Head	0-2a	—	×	CAROLVS·D·G·MAG· BRI·FRA·ET·HIB·REX	R-4a	Privy mark Castle added to left of angel's spear. Blackamoor's Head to right of spear not removed.
Castle	0-3	—	×	CAROLVS·D·G·MAG: BR·FRA·ET·HIB·REX·	R-4a	
	0-4	—	×	CAROLVS·D·G·MAG: BRI·FRA·ET·HI·REX·	R-3a, R-4a	With R-4a AHB, 1957.
⚓ and Castle .	0-4a	—	×	CAROLVS·D·G·MAG: BRI·FR·ET·HI·REX	R-5	⚓ mark added between REX and top of spear. Privy mark Castle not removed.
⚓ . . .	0-5	—	×	CAROLVS·D·G·MAG: BRI·FR·ET·HI·REX	R-4b	Punctuation after CAROLVS doubtful (HLF).
	0-6	—	×	CAROLVS·D·G·MAG: BR·FR·ET·HI·REX·	?	Not recorded in this stage. Known from overstrike (Die 0-6a).
Heart . . .	0-6a	—	×	CAROLVS·D·G·MAG: BR·FR·ET·HI·REX·	R-5a	Privy mark Heart struck over ⚓ (RCL).

Heart (<i>cont.</i>)	0-7	×	—	·CAROLVS·D'G·MAG' BRIT'FR'ET·HI·REX·	R-5a	Unusual letter F in FR, shaped almost like E (RCL).
	0-8	×	—	·CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX	R-5a, R-6	Unusual letter F in FRA as for die 0-7.
Feathers	0-8a	×	—	·CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX	?	Not recorded in this stage. Known from overstrike (die 0-8c).
Rose	0-8b	×	—	·CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX	?	Not recorded in this stage. Known from overstrike (die 0-8c).
	0-9	×	—	CAROLVS·D'G·MAG' BR'FR'ET·HI·REX	R-7	Small privy mark Rose (Ash).
	0-10	×	—	CAROLVS·D'G·MAG' BRIT'FR'ET·HI·REX·	R-5c	Large Rose mark possibly struck over a previous privy mark.
Harp	0-9a	×	—	CAROLVS·D'G·MAG' BR'FR'ET·HI·REX	R-5c, R-8	Privy mark Harp struck over Rose. With R-8. Soth 4-11-1957.
	0-8c	×	—	·CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX	R-9	Privy mark Harp punched over previous marks which were partly removed (Sp 1953). One specimen (Fitz) seems to read H instead of HI, but missing letter obliterated by double striking.
	0-11	×	—	CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX·	R-5c, R-9	With R-5c (Ash). With R-9 (Sp 1953).
	0-12	×	—	CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX·	R-10	Punctuation after FRA somewhat doubtful.
	0-11a	×	—	CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX·	R-8a	Privy mark Harp removed and replaced by Portcullis.
Bell	0-11b	×	—	CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX·	R-12	Privy mark Bell struck over partly removed Portcullis (WHMM).
	0-13	×	—	CAROLVS·D'G·MAG' BRIT'FRA'ET·HI·REX	R-10b, R-11	Unusually large mark of value. With R-10b (RCL). With R-11.
Crown	0-14	×	—	CAROLVS·D:G·MAG: BRIT:FRA:ET·HI·REX·	R-12a	Very large mark of value (Hunt).
	0-15	×	—	CAROLVS·D'G·MAG' BRIT'FRA'ET·HIB'·REX	R-12a, R-10c	Very large mark of value.

<i>Privy marks</i>	<i>Die number</i>	<i>By Dragon's Tail</i>	<i>By Dragon's Head</i>		<i>Occurs with reverse die</i>	<i>Remarks</i>
Crown (<i>cont.</i>)	0-16	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	?	Not recorded in this stage. Known from overstrike (die 0-16a).
Tun . . .	0-16a	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	R-13a, R-14	Privy mark Tun struck over Crown. With R-13a (Ray 16-2-1950).
	0-17	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	R-14	(Ash).
⌘ . . .	0-16b	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	R-15	Privy mark ⌘ struck over partly removed previous marks.
	0-17a	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	R-14a	Privy mark Tun removed and replaced by ⌘.
	0-18	×	—	CAROLVS·D'G'MA'· BR'FR'ET·HI'REX⌘	R-16	Large mark of value. Privy mark to left of Lance.
Δ . . .	0-16c	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	R-14b	Privy mark Δ struck over ⌘ and over partly removed previous marks.
	0-17b	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	?	Privy mark Δ over ⌘. Not recorded in this stage. Known from overstrike (die 0-17d).
	0-19	×	—	CAROLVS·D'G'MAG'· BRI'FRA'ET·HIB'REX·	R-17	Glen 6-4-1954.
	0-20	×	—	CAROLVS·D'G'MAG'· BRI'FR'ET·HI'REX	R-18	VJER 30-6-1950.
	0-21	×	—	CAROLVS·D'G'MAG'· BRI'FRA'ET·HI'REX	R-18	
Star . . .	0-17c	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	?	Privy mark Star replaces Δ over ⌘. Not recorded in this stage. Known from overstrike (die 0-17d).
	0-21a	×	—	CAROLVS·D'G'MAG'· BRI'FRA'ET·HI'REX	?	Privy mark Star replaces Δ. Not recorded in this stage. Known from overstrike (die 0-21b).
	0-22	×	—	CAROLVS·D'G'MAG'· BRI'FR'ET·HIB'REX·	?	Not recorded in this stage. Known from overstrike (die 0-22a).

Star (<i>cont.</i>) . . .	0-23	×	—	CAROLVS·D'G'MA'· BR' (?)	?	Not recorded in this stage. Known from overstrike (die 0-23 <i>a</i>). This might be 0-18 <i>b</i> .
Ⓢ . . .	0-17 <i>d</i>	×	—	CAROLVS D'G'MAG'· BRI'FR'ET HI'REX	R-19 <i>a</i>	Ⓢ Mark struck over Star and over partly removed previous privy marks.
Ⓐ . . .	0-21 <i>b</i>	×	—	CAROLVS·D'G'MAG'· BRI'FRA'ET HI'REX	R-20 <i>a</i>	Ⓐ Mark struck over Star and over Ⓐ.
Ⓐ . . .	0-22 <i>a</i>	×	—	CAROLVS·D'G'MAG'· BRI'FR'ET·HIB'REX·	R-21 <i>a</i>	Ⓐ Mark struck over Star.
Ⓐ . . .	0-23 <i>a</i>	×	—	CAROLVS·D'G'MA'· BR' (?)	?	Ⓐ Mark struck over Star. Recorded from Montagu Sale 1897, 5th portion, Lot 333. This might be 0-18 <i>c</i> in which case it is liable to have the privy mark Ⓐ (over Star over Δ over ⚔) to the left of the archangel's lance. Reverse of coin unknown.

THE ANGELS OF CHARLES I
REVERSES

<i>Privy marks</i>	<i>Die number</i>	<i>Ship ornaments (1 = Lion-Lis, 2 = Lis-Lion)</i>	<i>Emblem on Poop</i>	<i>Rigging</i>	<i>Legend divided: AMOR/POPVLI</i>	<i>Legend divided: PRAESIDIVM/REGIS</i>		<i>Occurs with obverse die</i>	<i>Remarks</i>
Lis . . .	R-1	1	Lion	A	—	—	AMOR'POPVLI' PRÆSIDIVM'REGIS:	0-1	Privy mark beginning of legend.
Cross Calvary .	R-1a	1	Lion	A	—	—	AMOR'POPVLI' PRÆSIDIVM'REGIS:	0-1a	Privy mark Lis removed and replaced by Cross Calvary.
	R-2	1	Lion	B	—	—	AMOR'POPVLI' PRÆSIDIVM'REGIS:	0-1a	Privy mark beginning of legend.
Blackamoor's Head .	R-2a	1	Lion	B	—	—	AMOR'POPVLI' PRÆSIDIVM'REGIS:	0-1b	Privy mark Blackamoor's Head struck over Cross Calvary.
	R-3	2	Lion	C	—	×	AMOR POPVLI PRÆSIDIVM REGIS	?	Not recorded in this stage. Known from overstrike (die R-3a). No punctuation.
	R-4	2	Lis	D	—	×	AMOR · POPVLI · PRÆSIDIVM · REGIS	0-2	
Castle . . .	R-3a	2	Lion	C	—	×	AMOR POPVLI PRÆSIDIVM REGIS	0-4	Privy mark Castle struck over Blackamoor's Head. No punctuation (AHB).
	R-4a	2	Lis	D	—	×	AMOR · POPVLI · PRÆSIDIVM · REGIS	0-2a, 0-3, 0-4	Privy mark Castle struck over Blackamoor's Head.
⚓ . . .	R-4b	2	Lis	D	—	×	AMOR · POPVLI · PRÆSIDIVM · REGIS	0-5	Privy mark ⚓ struck over Castle over Blackamoor's Head (HLF).

C 579	⚓ (cont.) . .	R-5	2	°Lis°	E	—	×	AMOR POPVLI PRÆSIDIVM REGIS	0-4a	Additional block above sail. No punctuation.
	Heart . .	R-5a	2	°Lis°	E	—	×	AMOR POPVLI PRÆSIDIVM REGIS	0-6a, 0-7, 0-8	Privy mark Heart struck over ⚓. No punctuation.
		R-6	2	Lis	F	×	×	AMOR POPVLI PRÆSIDIVM REGIS	0-8	No punctuation except after POPVLI.
	Feathers . .	R-5b	2	°Lis°	E	—	×	AMOR POPVLI PRÆSIDIVM REGIS	?	Not recorded in this stage. Known from over- strike (die R-5c). No punctuation.
	Rose . .	R-5c	2	°Lis°	E	—	×	AMOR POPVLI PRÆSIDIVM REGIS	0-9a, 0-10, 0-11	Privy mark Rose struck weakly and unevenly over previous marks. No punctuation.
		R-7	?	Lis	G	—	×	AMOR POPVLI PRÆSIDIVM REGIS	0-9	Privy mark large Rose. Ship ornaments doubtful (Ash).
	Harp . .	R-8	2	°Lis°	H	—	—	AMOR POPVLI PRÆSIDIVM REGIS	0-9a	Three pellets ∙ behind last lion of ship orna- ments. Two blocks at prow (Soth 4-11-57).
		R-9	1	Lis	I	—	—	AMOR POPVLI PRÆSIDIVM REGIS	0-8c, 0-11	(Fitz, Sp, 1953).
		R-10	2	°Lis°	J	×	—	AMOR POPVLI PRÆSIDIVM REGIS	0-12	
	Portcullis . .	R-8a	2	°Lis°	H	—	—	AMOR POPVLI PRÆSIDIVM REGIS	0-11a	Privy mark Portcullis struck over Harp.
Y		R-10a	2	°Lis°	J	×	—	AMOR POPVLI PRÆSIDIVM REGIS	?	Not recorded in this stage. Known from over- strike (die R-10b).
	Bell . .	R-10b	2	°Lis°	J	×	—	AMOR POPVLI PRÆSIDIVM REGIS	0-13	Previous privy marks removed, Bell mark punched into die. Pellet added before and after Bell.
		R-11	1	?	K	×	—	AMOR POPVLI PRÆSIDIVM REGIS	0-13	Glen. 24-11-1954. Pellet each side of Bell mark. Emblem on poop and part of rigging destroyed by piercing.
		R-12	1	Lis	L	—	—	AMOR POPVLI PRÆSIDIVM REGIS	0-11b	Pellet each side of Bell mark. Letter A with slant- ing top, Æ in PRÆSIDIVM from unusual straight punch (WHMM).
	Crown . .	R-10c	2	°Lis°	J	—	—	AMOR POPVLI PRÆSIDIVM REGIS	0-15	Previous privy marks removed but first pellet added on R-10b before privy mark maintained. Crown mark punched into die.














<i>Privy marks</i>	<i>Die number</i>	<i>Ship ornaments</i> (1 = <i>Lion-Lis</i> , 2 = <i>Lis-Lion</i>)	<i>Emblem on Poop</i>	<i>Rigging</i>	<i>Legend divided:</i> AMOR/POPVLI	<i>Legend divided:</i> PRÆSIDIVM/REGIS		<i>Occurs with</i> <i>obverse die</i>	<i>Remarks</i>
Crown (<i>cont.</i>)	R-12a	1	Lis	L	—	—	·AMOR·POPVLI· PRÆSIDIVM·REGIS	0-14, 0-15	Privy mark Bell removed and replaced by Crown mark. Pellets before and after Bell also removed.
	R-13	1	Lis	M	×	×	·AMOR POPVLI· PRÆSIDIVM·REGIS	?	Not recorded in this stage. Known from over-strike (R-13a).
Tun	R-13a	1	Lis	M	×	×	·AMOR POPVLI· PRÆSIDIVM·REGIS	0-16a	Privy mark Tun struck over Crown (Ray 16-2-1950).
	R-14	1	Lis	N	×	×	AMOR·POPVLI· PRÆSIDIVM REGES	0-16a, 0-17	Letter Æ in REGES.
☛	R-14a	1	Lis	N	×	×	AMOR·POPVLI· PRÆSIDIVM REGES	0-17a	Privy mark ☛ struck over Tun (removed). Letter Æ in REGES changed to E.
	R-15	1	Lis	O	—	×	·AMOR·POPVLI· PRÆSIDIVM·REGIS	0-16b	Pellet before and after each Lis in ship ornament.
	R-16	1	°Lis°	P	—	×	AMOR POPVLI PRÆSIDIVM REGIS	0-18	No punctuation.
Δ	R-14b	1	Lis	N	×	×	AMOR·POPVLI· PRÆSIDIVM REGES	0-16c	Privy mark Δ struck over ☛ and Tun (removed) (RCL).
	R-17	1	°Lis°	Q	—	×	AMOR·POPVLI· PRÆSIDIVM·REGIS	0-19	Glen 6-4-1954.
	R-18	1	Lion	R	—	×	AMOR·POPVLI· PRÆSIDIVM·REGIS	0-20, 0-21	

Star . . .	R-19	1	Lis	S	—	×	AMOR·POPVLI· PRÆSIDIVM·REGIS	?	Not recorded in this stage. Known from over- strike (die R-19a).
	R-20	1	Lis	T	—	×	AMOR·POPVLI· PRÆSIDIVM·REGIS	?	Not recorded in this stage. Known from over- strike (die R-20a).
	R-21	1	Lis	U	—	×	AMOR POPVLI· PRÆSIDIVM·REGIS	?	Not recorded in this stage. Known from over- strike (die R-21a).
⊕ . . .	R-19a	1	Lis	S	—	×	AMOR·POPVLI· PRÆSIDIVM·REGIS	0-17d	Privy mark ⊕ struck over Star. Straight Æ punch in PRÆSIDIVM.
⊙ . . .	R-20a	1	Lis	T	—	×	AMOR·POPVLI· PRÆSIDIVM·REGIS	0-21b	Privy mark ⊙ at beginning of legend. Struck over Star (HFV 1957).
⊙ . . .	R-21a	1	Lis	U	—	×	AMOR POPVLI· PRÆSIDIVM·REGIS	0-22a	Small privy mark ⊙ struck over Star.

USE AND LIFE OF REVERSE DIES

REVERSE DIE NUMBER	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9	R-10	R-11	R-12	R-13	R-14	R-15	R-16	R-17	R-18	R-19	R-20	R-21
Ⓐ																					
Star																					
Triangle																					
⚡																					
Tun																					
Crown																					
Bell																					
Portcullis																					
Harp																					
Rose																					
Feathers																					
Heart																					
⚓																					
Castle																					
Blackamoor's Head																					
Cross Calvary																					
Lis																					

LIST OF ILLUSTRATIONS ON PLATES XV, XVI, XVII

1. (BM) privy mark Lis. 0-1
2. (BM) privy mark Cross Calvary. 0-1a
3. (BM) privy mark Blackamoor's Head. 0-1b
4. (BM) privy mark Blackamoor's Head. 0-2
5. (HH) privy marks Castle and Blackamoor's Head. 0-2a
6. (BM) privy mark Castle. 0-3
7. (BM) privy mark Castle. 0-4
8. (BM) privy marks  and Castle. 0-4a
9. (HLF) privy mark . 0-5
10. (HSF) privy mark Heart. 0-6a
11. (RCL) privy mark Heart. 0-7
12. (BM) privy mark Heart. 0-8
13. (Ash) privy mark Rose. 0-9
14. (BM) privy mark Rose. 0-10
15. (Ash) privy mark Harp. 0-11
16. (BM) privy mark Harp. 0-12
17. (BM) privy mark Portcullis. 0-11a
18. (Glen) privy mark Bell. 0-13
19. (Hunt) privy mark Crown. 0-14
20. (BM) privy mark Crown. 0-15
21. (RCL) privy mark Tun. 0-16a
22. (Ash) privy mark Tun. 0-17
23. (BM) privy mark . 0-18.
24. (Glen) privy mark Triangle. 0-19
25. (VJER) privy mark Triangle. 0-20
26. (BM) privy mark Triangle. 0-21
27. (BM) privy mark . 0-17b
28. (Sp) privy mark . 0-21b
29. (BM) privy mark . 0-22a
30. (BM) privy mark Lis. R-1
31. (BM) privy mark Cross Calvary. R-2
32. (BM) privy mark Blackamoor's Head. R-2a
33. (AHB) privy mark Castle. R-3a
34. (BM) privy mark Castle. R-4a
35. (BM) privy mark . R-5
36. (BM) privy mark Heart. R-5a
37. (Sp) privy mark Heart. R-6
38. (BM) privy mark Rose. R-5c
39. (Ash) privy mark Rose. R-7
40. (Soth) privy mark Harp. R-8
41. (Sp) privy mark Harp. R-9
42. (Glen) privy mark Harp. R-10
43. (BM) privy mark Portcullis. R-8a
44. (Glen) privy mark Bell. R-11
45. (BM) privy mark Crown. R-12a
46. (BM) privy mark Crown. R-10c
47. (RCL) privy mark Tun. R-13a
48. (BM) privy mark Tun. R-14
49. (CN) privy mark . R-14a
50. (Ash) privy mark . R-15
51. (BM) privy mark . R-16
52. (Glen) privy mark Triangle. R-17
53. (BM) privy mark Triangle. R-18
54. (BM) privy mark . R-19a
55. (Sp) privy mark . R-20a
56. (BM) privy mark . R-21a



1. 0-1



2. 0-1a



3. 0-1b



4. 0-2



5. 0-2a



6. 0-3



7. 0-4



8. 0-4a



9. 0-5



10. 0-6a



11. 0-7



12. 0-8



13. 0-9



14. 0-10



15. 0-11



16. 0-12



17. 0-11a



18. 0-13



19. 0-14



20. 0-15





21. O-16a



22. O-17



23. O-18



24. O-19



25. O-20



26. O-21



27. O-17b



28. O-21b



29. O-22a



30. R-1



31. R-2



32. R-2a



33. R-3a



34. R-4a



35. R-5



36. R-5a



37. R-6



38. R-5c



39. R-7



40. R-8





41. R-9



42. R-10



43. R-8a



44. R-11



45. R-12a



46. R-10c



47. R-13a



48. R-14



49. R-14a



50. R-15



51. R-16



52. R-17



54. R-19a



53. R-18



56. R-21a



55. R-20a



Briot





FIVE SEVENTEENTH-CENTURY COIN HOARDS FROM ULSTER

By W. A. SEABY

DURING much of the hundred years from 1590 to 1690 Ireland was in a turbulent state. Not only was there a long war near the beginning of this period between the English troops and the forces of Hugh O'Neill, Earl of Tyrone, but two bitter rebellions broke out, one in 1641 and the other in 1688, lasting eight and two and a half years respectively. In the intervening periods the plantation of Ulster by English and Scottish settlers was not without incident while the Cromwellian settlement in Ireland was as harsh and bitter as any during Tudor times.

In anticipation of the revocation of the Edict of Nantes, 1685, many protestants fled from Flanders and northern France and settled in Ireland to promote and develop the linen industry, although all non-conforming bodies had been 'officially' subjected to the English Act of Settlement, the Act of Uniformity, and other forms of religious intolerance since the Restoration.

It is not surprising, therefore, that many coin hoards which can be dated between the start of the Nine Years' War in 1593¹ and the late Stuart period should have been unearthed in the northern province. Those which specifically relate to the Great Rebellion (i.e. the period of the English Civil War) or to the reformation of the coinage in 1662-3 have been recently dealt with.² The particular hoards described in detail here are unusual in that each is composed of a mixture of coins including those of English, Scottish, Irish, west European, and Spanish-American origin. The earliest and first to be described, from Co. Antrim, is almost certainly a purseful of change, the copper all emanating from Scotland; the second, a somewhat amorphous group of copper pieces mostly French, could well have been intended for use as local tokens by overstriking; the two silver hoards and the mixed silver and copper hoard, dating from the last quarter of the seventeenth century, reflect all too clearly the serious drain on English currency which had taken place in Ireland since the end of the Great Rebellion, and illustrate the building up of foreign currency at the hands of Portuguese, Spanish, French, and Netherlandish traders, of Huguenot refugees, and perhaps even of Dutch troops arriving with William III.

A number of other records which may be cited show that seventeenth-, and even eighteenth-, century hoards discovered in Ireland have not infrequently produced coins of mixed origin; most of the finds made in the nineteenth century are given on the authority of James Carruthers:³ (1) a hoard, said to

¹ Several hoards dating from Elizabethan times have been discovered in the North of Ireland, see Lindsay, *Coinage of Ireland* (1839), 136; *Ulster Journ. Archaeol.* i (1853), 164-7; *Journ. Roy. Soc. Antiq. Ireland*, iii (1854-5), 61; *B.N.J.* viii (1912), 361. Not all of these hoards necessarily include late pieces, but a typical deposit from the beginning of our period is that found at Castle-town, Portglenone, Co. Antrim, in 1937. It consisted of one shilling, mm. bell, and 180 sixpences, the latest of which was dated 1592, see *B.N.J.*, xxiii (1938-40), 285-6.

² *B.N.J.* xxix (1959), 404-14.

³ *Ulster Journ. Archaeol.* i (1853), 164-7; *Journ. Roy. Soc. Antiq. Ireland*, iii (1854-5), 61, 373.

have weighed 2 lb. 10 oz., containing about 300 or more coins ranging from Henry VIII to Charles II (shillings or merks dated 1669), and including twenty-dollar pieces of Philip IV of Spain, discovered by a farmer while removing part of an old ditch (i.e. bank) in the townland of Ballyvesey, Carnmoney, Co. Antrim, March 1816;¹ (2) a tea-cup filled with French and Spanish gold coins in the thatch of an old house near Newtownards, Co. Down in 1820; (3) over 60 ounces of silver and copper coins struck in Holland during the years 1609–60, also a base shilling of Charles II, found at Sandy-mount, Richhill, Co. Armagh, 1851 (or 1853); (4) a number of large silver coins of Louis XIII and XIV, together with a quantity of Elizabeth's Irish copper pennies and halfpennies, which turned up near Armagh in 1850; (5) 500 silver coins, including French, Austrian, Spanish, and Dutch dollars and one of Louis XIV dated 1670, found in the new Shambles (Market) in King Street, Limerick, 1853; (6) a large parcel of old Spanish dollars found in Co. Cork, 1852; (7) four hoards of the Commonwealth period dug out of a bracken-covered sandhill at Portarlinton, Co. Leix, between 1946 and 1948, altogether comprising 75 English gold and 5 silver coins, 1 Scottish and 6 Irish gold pieces, 2 French, 1 Italian (Savoy), and 14 Spanish gold coins.²

In addition to hoards a number of isolated finds of foreign coins have been recovered here. A very typical example known to the writer is that made by a Newtownards schoolboy, J. Cardwell, in March 1961.³ In a bank at the end of his garden in Mill Street, Comber, he unearthed an eighth écu of Henry III of France (1575–89), minted at Nantes. About 250 yards to the north is Castle Farm, which marks the site of the former Mount-Alexander Castle, a residence built about 1620.⁴

Two other single finds, both of late-seventeenth-century date, may be noted. One was a four-mark piece or daler of Christian V of Denmark, dated 1692, found by Mr. Lyons, a workman of the Highway Department, during excavations in the Dublin Road, Belfast; it was given to the museum by Mr. J. H. C. Fox in 1957. The other was a ducaton of Charles II of Spain struck for the province of Brabant in 1684. It was brought to the museum for identification in November 1959 by a workman who said it belonged to a colleague, Mr. John Carrol of Sydenham, Belfast. Although no details of place or date of discovery were revealed, the coin is likely to have been a local find.⁵

The reason for these unusual deposits and chance losses is not far to seek. That astute scholar and Fellow of the Royal Society, James Simon, merchant of Dublin, published in 1749 what he modestly called 'An Essay towards an Historical Account of Irish Coins and of the Currency of Foreign Monies in Ireland with an Appendix containing several statutes, proclamations, patents, acts of State and Letters relating to same';⁶ and this work, republished in

¹ *Newry Magazine*, ii (1816), 168.

² *B.N.J.* xxix (1959), 411, no. 22, where a total of 104 coins in the series of hoards is implied.

³ I am indebted to Mr. E. M. Griffith, master at Regent House School, Newtownards, for submitting this coin to the Belfast Museum (which has recently become the Ulster Museum); also for supplying notes on the find-spot and the Montgomery family.

⁴ *The Montgomery Manuscripts* (edit. Hill, 1869), 93.

⁵ Cf. the contents of hoards III and IV listed below.

⁶ Published with the approbation of the Physico-Historical Society at a general meeting held in Dublin, 4 Jan. 1747.

1810 with two supplements, is still the firm basis for any study of Irish numismatics, at least from the period of Henry II. Not only did Simon transcribe all the documents he was able to locate having reference to the employment of coinage in Ireland in his 104-page Appendix, but he set out in a number of tables the weight-values of foreign currency in England and Ireland at different periods and commented on the significance of the various statutes in the text of his book. The following notes are freely taken from the second edition; also from Dudley Westropp's important paper on Irish money weights and foreign coins current in Ireland.¹

On more than one occasion in the seventeenth century efforts were made by the Lord Deputy and Council to get a mint re-established in Dublin owing to the extreme shortage of currency in the country; but although royal consent was obtained, unsettled conditions and lack of financial backing prevented any real start being made with the project.² Nevertheless in 1642 and 1643 a great deal of plate was called in for coining into 'money of necessity' to pay troops brought over to suppress the Rebellion, and it is estimated that at least £120,000 was so stamped and used. During the war the rebels struck their own coinage, and certain of the southern towns (Cork, Youghal, and Kinsale) issued tokens.³

In 1651 several persons in London sent over great quantities of counterfeit and clipped English money and 'base Peru-pieces' which their agents imposed on the merchants in Dublin. A proclamation the following year ordered that clipped money should not be given or taken in payment except by weight, at the rate of five shillings per ounce, the Spanish-American coins for their intrinsic worth only.⁴ In 1660 Charles II raised the value of gold and silver in Ireland and later the same year declared current and ascertained the value of certain foreign coins. The silver included the 'Mexico or Sevil piece-of-eight' the 'Rix-dollar or cross dollar', the 'Portugal Royal', the 'Duccaton', 'old Peru-piece' and 'French-Lewis' together with their respective divisions. A certain allowance was made for each grain deficient in weight both of the gold and silver coins.⁵

The Restoration was, therefore, the occasion when it was *officially* recognized that Irish trade and indeed every-day commercial life could not continue without general employment of foreign currency in addition to the stamped silver from South America which had long been in use. Two years later another proclamation was issued ordering that the new 'pillar pieces' of Mexico, which were not specifically mentioned in 1660, should pass for 4s. 9d.

¹ Westropp, *Proc. Roy. Irish Acad.* xxxiii, Section C, no. 3 (1916), 43-72 and pl. v; see also *B.N.J.* xxi (1935), 100-1.

² Apart from letters patent granted to various persons to issue copper tokens, see Simon, 45, 47, 49, 112-13, 119-20.

³ Simon, 46-48. But the author is wrong in thinking that the St. Patrick's halfpennies and farthings were issued by the general assembly at Kilkenny; they date from the reign of Charles II, about 1678-9. See Nelson, *The Coinage of Ireland in Copper, Tin and Pewter* (Leamington, 1905), 16-18.

⁴ *Council Office Book*, A.90, 360; A.30, 148; Simon, 49, 119-20. 'Yet we find that unless power be given to coin the clipt money here (which is wanting in our instructions) this evil will again grow upon us (the good English money being carried back into England) and in a short time no currant money will be left here but forreign money, and very much of that either light or course Peru.'

⁵ Simon, 50-51, 123-4, Westropp, 47-48.

each.¹ In July 1673 we find stern measures, passed by the Lord Lieutenant and Council, expressly forbidding anyone to export without licence 'coins of this realm' or 'any plate, bullion, gold or silver wrought or unwrought except onely so much as shall be necessary for his reasonable expences'. Searchers of his Majesty's ports in the realm and others specially appointed were strictly charged to be careful and vigilant in the execution of all the laws and statutes then in force regarding the export of bullion.² A further proclamation on similar lines appeared in 1675.³

During the same year the Earl of Essex again invoked the royal authority by raising the value of the Portuguese crusadoes from 3s. 8d. to 3s. 10d.;⁴ and in 1677 the Lord Lieutenant proclaimed that no officer of the Crown, 'nor any person of what quality or condition soever' was required or enforced to be paid in the 'new-lyon-dollars'. These *leeuwendaalders*, dated 1674, 1675, and 1676, quantities of which merchants and others had recently brought from Holland into Ireland and passed for 4s. 9d., were found on assay to be 2 oz. 5 dwt. in the pound worse than the standard of England and were not to be accepted for more than 3s. 4½d. sterling.⁵

Three more proclamations may be cited: one, issued on 6 June 1683, ascertained the employment of foreign coinage in Ireland and set out new rates of exchange for the various gold and silver denominations;⁶ another during the reign of James II on 16 January 1687 recited and confirmed the former proclamation;⁷ while the last, published immediately after the king had arrived in Dublin on 24 March 1688-9, raised the value of English and foreign gold and silver in an attempt to prevent further money leaving Ireland.⁸ Thereafter 'the presses or coyning mills' used for striking the official halfpence, then in the hands of Col. Roger Moore, were seized and the issue of the 'Gun money' began.⁹ It is perhaps noteworthy that the 1683 proclamation makes special reference to the number and shape of the coin weights to be used for testing the foreign money, and it orders that these shall 'be exactly made by Henry Paris and John Cuthbeard of the City of Dublin'.¹⁰

Throughout these statutes no mention appears to be made of Scottish money although we know from the numerous discoveries that it must have been circulating, particularly in the north, currently with the English and foreign coinage. It can only be assumed that as the merk passed for a shilling and a penny farthing in England during the seventeenth century the same rate obtained over here.

¹ C.O.B. A.42, no. 162; Simon, 52, 132; Westropp, 48. An eight-real piece of Nuevo Reino (Santa Fé de Bogota), 1662, of this type but unusual in design (Yriarte, *Catalogo*, etc. (1955), 63, no. 189), and weighing only 320 gr., was picked up recently near Emyvale, Co. Monaghan, and is now in the museum at Belfast.

² C.O.B. A.43, no. 147; Simon, 53, 133.

³ C.O.B. A.43, no. 158; Simon, 137.

⁴ Earl of Essex's letters manuscripts; Simon, 53, 134-6; Westropp, 48.

⁵ C.O.B. A.43, no. 212; Simon, 53, 137; Westropp, 48-49.

⁶ C.O.B. A.43; Simon, 55, 142-4; Westropp, 50-52.

⁷ Simon, 56, 146-7; Westropp, 53.

⁸ C.O.B. A.44, no. 68; Simon, 56-57, 147-8; Westropp, 53-54.

⁹ *Book of Orders J.R.*, Audit Office, Dublin, 3; Simon, 58, 148.

¹⁰ Simon, 143; Westropp, 52. A number of weights of this date are in the Belfast cabinet; most are 20 dwt., 16 gr., the equivalent of the ducaton. One of these weights, presented by Mr. Robert H. Montgomery, was found in Saintfield Road on the outskirts of Belfast in 1955.

Thus two of the most unusual features about hoards of this period found in Ireland—their high foreign content and the scarcity of English pieces, except those which were obsolete at the time of deposit,¹—are easily explained in the light of contemporary documentation and the economic stresses of the times. The absence of a Dublin mint, or of a special currency supplied from Britain, was a great hindrance to trade and an inducement towards fraud, particularly from unscrupulous merchants in England and abroad. Inevitably it became necessary not only to adopt foreign coinage for transactions generally but to test all such currency by weight, a slow and cumbersome business which was itself open to corruption.²

Note: Weights throughout are given in grains to the nearest half. During the period under discussion the £ sterling was officially, or unofficially, worth from 1s. to 5s. above its face value in Ireland, hence its propensity to be so readily marketable.

I. CAPANAGH TOWNLAND, near Larne, Co. Antrim, 1954.

The group of coins described below was found by Mr. Wm. Scott Beggs and his father, Mr. Edwin Beggs, of Brookvale, Kilwaughter, while cutting turf in a bog, the property of W. J. and H. McAllister, in the townland of Capanagh. The find was reported to Queen's University by Miss P. Beggs. The deposit was uncovered about a foot below the surface and consisted of five silver and forty-two copper coins, ranging in date from 1564 to about 1633.³

The silver coins were worn while those of copper had been badly attacked by peat acids. In the turf around the coins was a reddish stain suggesting that the deposit was originally contained in a leather bag or purse. As the find was of no great monetary worth the coroner of the district decided not to hold an inquest, the coins being taken over by the Northern Ireland Ministry of Finance and later identified at the British Museum.

For the detailed list of Charles I second issue turners I am indebted to Mr. Robert Stevenson of Edinburgh, whose recent study of the subject has established a sequence of crowns and mint-marks on these tiny Scottish pieces.⁴ Since the coins stop in the middle of the crown III issue he is reasonably certain that the collection was formed not later than 1632. This might suggest that whoever had the coins in his possession left Scotland about that date, although, of course, it does not imply that they were immediately concealed. It is noteworthy that they include no current English or Irish issues such as would have been 'legal tender' in Ulster at that period. Probably the bag or purse was brought over to this area by one of the numerous Lowland settlers and then accidentally dropped in the bogland on the Antrim hills and not recovered.

¹ This is not true of hoards dating from the period of the Great Rebellion, for then quantities of English currency were used for paying troops, &c., *B.N.J.*, xxix (1959), 405.

² Westropp, 55–56.

³ First reported in the *Northern Whig*, 21 May 1954, after a preliminary examination of the site and hoard had been made by Mr. Bruce Proudfoot and Mr. Ronald Buchanan of the Geography Department, Queen's University.

⁴ Stevenson, 'The Stirling Turners of Charles I, 1632–9', *B.N.J.* xxix (1959), 128–51 and pls. ix and x.

SILVER

ENGLAND

Elizabeth I (1558-1603)

- 1, 2 Threepences, mm. pheon, 1564; mm. lion or portcullis (?) 1566. Both very worn (16 gr.; 12½ gr.) 2

FRANCE

Henry III (1574-89)

- 3 Quart d'écu, 1585; mm. T and rose (?), Nantes mint. *Obv.* channelled cross fleury, quatrefoil in centre, pellet in field. *Rev.* crowned arms dividing II II, pellet in field. Some wear (147½ gr.) 1

Louis XIII (1610-43)

- 4 Quart d'écu, 1629; mm. L, anchor (?) and V B monogram, Bayonne mint. Type as no. 3 (143 gr.) 1

SCOTLAND

James VI (1567-1625)

- 5 Quarter thistle merk, 8th coinage, 1610-4. Badly decayed and in three fragments (7 gr.) 1

COPPER

- 6-8 Turners, 2nd issue, 1623-5. All decayed around edge (23 gr.; 25 gr.; 19½ gr.) 3

James VI or Charles I (1625-49)

- 9, 10 Turners, issues 1623-32. Both much decayed (10 gr.; 21½ gr.) 2

Charles I (1625-49)

- 11-13 Turners, 1st issue, 1629-32. Somewhat decayed (22½ gr.; 23½ gr.; 21 gr.) 3

- 14-47 Turners, 2nd issue, 1632 period. Many decayed and very fragile (total weight 270 gr.). Detailed report by R. B. K. Stevenson:

(i) English crown I; dots (or lozenges) beside •C II R•

(a) Mms. *obv.* lozenge; *rev.* rosette

Rev. only, flower as 1631 pattern, leaves second variety, inner ring not continuous over flower (1); crown distinguishable but one or both mms. not legible (10); •C II R• but crown not distinguishable, mms. as foregoing (4); probably crown I to judge by the thistle, mm. illegible (1) 16

(b) Mm. lozenge on both sides; lozenges for dots beside ♦C II R♦ Two with *rev.* mm. visible, of these one has indistinct crown which may be crown II (2); one with *obv.* only and mm. lost, but letter C marks this type (1) 3

(c) Mm. *obv.* lozenge; *rev.* rose

Obv. mm. and crown indistinguishable, lozenges for dots beside ♦C II R♦ 1

(d) Unique coin; *obv.* mm. lozenge, overstruck by anemone (?); *rev.* mm. anemone (?) 1

(ii) Scottish crown II, no dots or lozenges beside C II R

(a) Crown and *rev.* mm. unfortunately uncertain.

Large C on *obv.* and in one case, at any rate, thistle like I (b), but no dots beside C II R 2

(b) Mm. <i>obv.</i> (probably lozenge); <i>rev.</i> rose Large II on <i>obv.</i>	1
(c) Mm. <i>obv.</i> (probably lozenge); <i>rev.</i> lozenge Large II on <i>obv.</i>	1
(d) Mm. <i>obv.</i> (probably lozenge); <i>rev.</i> anemone (unique mule) Large II on <i>obv.</i>	1
(iii) Scottish crown III, wide plain arches and no jewels on band (Briot's coinage)	
(a) Mm. <i>obv.</i> anemone (probably with dot below); <i>rev.</i> anemone <i>Obv.</i> mm. illegible; <i>rev.</i> clear (1); both mms. very uncertain (1)	2
(b) Mm. <i>obv.</i> lozenge; <i>rev.</i> anemone (??) <i>Rev.</i> mm. might be lozenge, but not so far known with this <i>obv.</i> crown	1
(c) Mm. <i>obv.</i> anemone with or without dot below it; <i>rev.</i> rose Anemone clear; <i>rev.</i> mm. illegible, but rose probable on account of the shape of M (2 kinds) (2); <i>obv.</i> mm. illegible; <i>rev.</i> distinguishable (2)	4
(d) Mms. indecipherable; <i>rev.</i> M suggests mm. anemone	1
Total	<u>47</u>

II. HIGH STREET, BELFAST, 1860-1

In the Canon Grainger collection at the Belfast Museum are two seventeenth-century copper coins (nos. 1 and 8 listed below), on the envelopes of which is the note: 'Found in old bed of river in High Street, Belfast, 1860 with three others.' In June 1961 Dr. J. A. Wallace of Lower Baggot Street, Dublin, sent to the museum six French coins of the same period (nos. 2 to 7) wrapped up in a piece of paper which stated: 'six coins found in deepening main sewer, High Street, Belfast 1860-1.'

The employment of French copper coins as small change in Ireland would seem to be by no means unusual during the first seventy years of the Stuart period. In the Belfast cabinet double tournois of Henry IV and Louis XIII, &c. and liards of Louis XIV are much commoner than the Harrington, Lennox, Richmond, and Maltravers farthings of James I and Charles I,¹ the Armstrong Irish farthings of Charles II, or the Scottish turners of the same general period. As almost all the museum coins may be said to have been acquired from local sources,² it follows that the French pieces were circulating in Ireland at the same time and in the same way as Stuart copper coinage.

That foreign coppers were used for a secondary purpose is also apparent since certain types of Irish tokens are found to be counterstruck over them. Indeed, the rather crude pennies of John Bush of Belfast are invariably on double tournois pieces³ while most of those struck by the unknown issuers, W. R. and D. M. of Lisnagarvy (Lisburn), show traces of French legends

¹ For instance, one might have expected some of the different varieties of copper farthings (issued under patent) which were certainly in use here, if sparingly.

² Either out of the Belfast Nat. Hist. and Phil. Society, which would include finds brought into the Old Museum, College Square, by members or others before 1911, or coins presented by, or purchased from, finders and collectors, mostly Ulster persons, during the last fifty years.

³ *Catalogue of Irish Tokens, 17th, 18th and 19th centuries*, Belfast Museum Publication no. 36 (1913), 12, no. 27.

under the design and inscription.¹ We know also that some of the coinage struck by James II in Ireland was made from French silver pieces.²

Coins said to have been recovered in Belfast are as follows:

COPPER

ENGLAND (OR IRELAND)

Charles I (1625-49)

- | | | |
|---|--|---|
| 1 | ‘Richmond’ oval farthing, mm. rose (<i>obv.</i> only) (6 gr.) | 1 |
|---|--|---|

FRANCE

Louis XIII (1610-43)

- | | | |
|---|--|---|
| 2 | Double Tournois, 1633, Lyons mint. <i>Obv.</i> LOVIS.XIII R.D.....NAVA., mm. D; laureate bust r. within linear circle. <i>Rev.</i> DOVBLE TOURNOIS and date, mm. cross potent; three fleurs-de-lis within linear circle (30 gr.) | 1 |
| 3 | Double Tournois, 1636 (?), (?) mint. <i>Obv.</i> LO.....DE.....FRAN .....AR; all traces of bust gone. <i>Rev.</i> .....B.....LO..... and date; ³ three fleurs-de-lis. In very battered condition (21½ gr.) | 1 |
| 4 | Double Tournois, 1638, Tours or Angers mint. <i>Obv.</i> similar legend to no. 2 but mm. E or F below; large laureate bust, draped and cuirassed r., which cuts beaded circle. <i>Rev.</i> as no. 2 but for date (26 gr.) | 1 |
| 5 | Double Tournois, 1643, La Rochelle mint. <i>Obv.</i> LVD•XIII•D•G•FR•ET NAV REX; laur. head l., no inner circle. <i>Rev.</i> as no. 2 but no inner circle and mm. H (32½ gr.). (The above coins in reasonably good condition except no. 3) | 1 |

(Provincial Issues)

Chateau-Renaud

- | | | |
|---|--|---|
| 6 | Double Tournois, of François de Bourbon-Condé (c. 1613-14), undated. <i>Obv.</i> F. DE. BOVRBON•P•DE•CONTI; traces of bust r. <i>Rev.</i> usual type without date, mm. cross pattée. Small countermark (flowerhead?) on this side. Only fair condition (22½ gr.) | 1 |
|---|--|---|

Dombes

- | | | |
|------|---|---|
| 7, 8 | Denier Tournois, of Gaston duc d'Orléans, 1650. <i>Obv.</i> GASTON. •V•F•P•D; bare head r., no inner circle. <i>Rev.</i> DENIER TOVRNOIS 1650; two fleurs-de-lis and large A within linear circle. One very poor (Wallace), the other in reasonably good condition (Grainger) (12½ and 21½ gr.) | 2 |
|------|---|---|

Total	8
	=

III. CHURCHQUARTER TOWNLAND, Dundonald, Co. Down, 1928⁴

On 23 August thirty-two silver coins were found by Joseph and Robert Dickson in ‘an old black sock’ which crumbled away on being touched, during

¹ Ibid., 19, no. 83, where, however, the fact of these tokens being overstruck on double tournois pieces is not recorded.

² *Sale of Lockett Collection*, part v (18/19 June 1957), Irish and Scottish coins, 82, lots 663 and 664. These are silver halfpennies of James II, dated 1690, overstruck on Louis XIV five sols, 1643. Lot 664 was acquired by Belfast Museum.

³ The date must be 1636 although it looks like 1656; the words DOVBLE TOVRNOIS are impossible to determine.

⁴ The original list was published by G. C. Brooke in *N.C.* 5th ser., viii (1928), 337. There are slight discrepancies between that list and the one which follows here.

the unloading of sand removed from a sandpit on a hill at Churchquarter, close to the Comber Road and about a quarter-mile from the old Dundonald tram terminus. The coins appear to have been in a bank which fell in during quarrying. With the coins was an English, or Scottish, gold posy ring of mid- or late-seventeenth century date.¹ At a subsequent inquest the coins were proved treasure trove and taken into the custody of the Ministry of Finance. The finders were rewarded the sum of £7 between them, this value having been placed on the hoard after consultation with the British Museum where the pieces were first examined.

All the coins now available have recently been re-examined and certain small additions and corrections made to the original list. It will be noted that the earliest coins are those of England, ranging from 1569 to 1636, those of the Low Countries and Spain run from 1634 to 1668, or perhaps 1670, and those of Scotland from 1670 to 1676. All the coins are in reasonably good condition except those of Spanish origin.

SILVER

ENGLAND

Elizabeth I (1558-1603)

- 1-3 Sixpences, 1569 (1); 1580 (1); 1582 (1) (all stolen while at Carrickfergus Castle and not now available for examination) 3

James I (1603-25)

- 4-6 Shillings, 1st coinage, 2nd bust, mm. thistle, 1603-4 (85 gr.) (1); mm. lis, 1604 (90 gr.) (1); 2nd coinage, 3rd bust, mm. rose, 1605 (91 gr.) (1) 3

Charles I (1625-49)

- 7, 8 Shillings, 4th bust, oval shield, mm. crown, 1635-6, type 3a (84 and 92 gr.) 2
9 Sixpence, 1st bust; square shield, mm. lis, 1625; type 1 (40½ gr.) 1

SCOTLAND

Charles II (1660-85)

- 10-14 Merks, 1st coinage, thistle below bust; $\frac{XIII}{4}$ in centre of reverse, 1670 (96½ gr.) (1); 1671 (96 gr.) (1); 1673 (95 gr. and 93 gr.) (3) 5
15 Quarter dollar, 2nd coinage; interlinked C's in centre of reverse, 1676 (94 gr.) 1

LOW COUNTRIES (under Spain)

Brabant, Philip IV (1621-65)

- 16, 17 Ducaton (60 stuivers), 1634, Antwerp mint. *Obv.* bust wearing cuirass and ruff; mm. hand. *Rev.* ARCHID•AVST•DVX•BURG•BRAB. Z^c royal arms supported by lions holding crown, Golden Fleece suspended below² (496 gr.); another, 1655, Antwerp mint; older bust wearing cuirass and lace collar³ (499 gr.) 2
18 Half ducaton (30 stuivers), 1658, Antwerp mint. Type as No. 17; mm. hand⁴ (249 gr.) 1

¹ *Newtownards Chronicle*, 1 Sept. 1928; *Belfast Telegraph*, 1 Sept. 1928, with photograph illustrating all the coins.

² H. Enno van Gelder et M. Hoc, *Les Monnaies des Pays Bas, Bourguignons et Espagnols, 1434-1713*, i (Amsterdam, 1960), 327, type 1. ³ *Ibid.*, 327, type 2. ⁴ *Ibid.*, 328, type 2.

- 19, 20 Patagon (50 stuivers), 1634, Brussels mint. *Obv.* crossed sceptres dividing date, crown above, Golden Fleece below; mm. head. *Rev.* crowned shield of royal arms surrounded by collar of the Golden Fleece¹ (418½ gr.); another, 1653, Antwerp mint² (431 gr.) 2

Flanders, Charles II (1665–1700)

- 21 Ducaton, 1668, Bruges mint. *Obv.* bust wearing collar of the Order of the Golden Fleece. *Rev.* ARCHID·AVST·DVX BURG·CO·FLAN·+7 [sic]; as no. 16³ (510 gr.) 1

UNITED PROVINCES

Holland

- 22 Daalder (50 stuivers), 1661. *Obv.* MO:NO:ARG.PRO.CON.FOE:BELG:CO:HOL.; armed warrior with sword on shoulder holding shield of arms of the Province of Holland dividing date. *Rev.* CONCORDIA·RES·PARVÆ·CRESCVNT; mm. arms, a pale (?) Crowned shield of arms of the United Provinces of the Netherlands⁴ (427½ gr.) 1

Oberyssel (Transisulania)

- 23 Daalder, 1659. *Obv.* as no. 22 but inscription ends BELG:TRAN: and the arms are those of the province of Oberyssel (Overijssel). *Rev.* as no. 22 but mm. sun⁵ (424 gr.) 1

SPAIN AND SPANISH AMERICA

Philip IV (1621–65) or Charles II (1665–1700)

- 24 Eight reals, 1651, either Segovia or Seville mint. *Obv.* crowned royal arms of Spain with two inescutcheons, VIII downward to r., but mint-mark or letters to left cut off. *Rev.* arms of Castile and Leon in ornamental cartouche, figure 5 of date upside down.⁶ Coin cut octagonally with inscriptions missing; rather crude work (411 gr.) 1
- 25, 26 Eight reals, about 1655–70, Seville mint. *Obv.* as no. 24 but traces of mint letters S above R to left. *Rev.* as last but no date visible⁷ (412 gr.); another, 1664, probably Seville mint⁸ (419 gr.). Both much hammered 2
- 27–29 Eight reals, 1659, Mexico mint. *Obv.* royal arms with only one inescutcheon, mint letter M with P below to left⁹ (419½ gr.); another, about 1665–70, Mexico mint, mint letters M with S (?) below to left¹⁰ (409 gr.); another, pre-1652, Potosi mint, with mint letter P to left¹¹ (408 gr.). All much hammered and worn 3
- 30 Eight reals, 1660, Potosi mint. *Obv.* type with crowned pillars of Hercules on sea and PLV SVL TRA across centre, the other six compartments have P/8·/E/E/60/PP; 60 also seen below waves. *Rev.* Arms in cartouche divided by cross pattée, crown above and E–E either side. Countermarked: 600, in compartment¹² (414 gr.) 1

¹ Ibid., 329, type 3.

² Ibid., 329, type 1.

³ Ibid., 348.

⁴ P. Verkade, *Muntboek Namen en Afbeeldingen von Munten* (Schiedam, 1848), pl. 47, no. 2.

⁵ Ibid., pl. 159, no. 1.

⁶ José de Yriarte, *Catálogo de los Reales de a ocho Españoles* (Madrid, 1955), 56, no. 131–2.

⁷ Ibid., 59, no. 151 and 72, no. 236.

⁸ Ibid.

⁹ Ibid., 62, no. 184.

¹⁰ Ibid., 74, no. 254.

¹¹ Ibid., 63, no. 186.

¹² Ibid., 65–66, nos. 213–4. The average weight of the seven pieces listed here is 413½ gr. As the dollar passed for 4s. 9d. (1660–83) at 17 dwt., these coins are up to standard in spite of their poor stamping and general condition.

31, 32	Two eight-real pieces (stolen while at Carrickfergus Castle and not available for examination)	2
	Total	<u>32</u>

GOLD

- 33 Posy Ring having plain hoop, of crescentic section, bearing small bezel (set square to plane of hoop) which originally contained a precious stone, probably a quadrangular diamond. Inside hoop is inscribed in sloping script: *I die or I schaing*. The word 'schaing' is Scottish for 'change' while the word 'or' presumably means 'ere' or 'before'.¹ Probably second or third quarter of the seventeenth century (29½ gr.)

IV. BALLYVARLEY TOWNLAND, near Banbridge, Co. Down, 1931²

On 25 February 1931 John Rice, a farmer, while digging earth from an old bank to fill in a well, discovered twenty silver coins. They were in a wooden container which lay at a depth of 5 or 6 inches from the surface and which crumbled on exposure. An inquest on the coins was held at Banbridge on 6 June 1931 when a verdict of treasure trove was returned. Nineteen coins, still available, were taken possession of by the Ministry of Finance, the finder being rewarded the sum of thirty shillings, approximately their bullion value.

Subsequently the small collection was placed on exhibition at Jordan's Castle, Ardglass, which is in the Ministry's charge and which has been opened periodically as a museum chiefly for the display of relics left by Francis J. Bigger, the Ulster antiquarian. Unfortunately, during the war period, 1940-5, the case in which they lay was broken into and the coins stolen; thus they are no longer available for scrutiny. The list which follows is that which was supplied by Dr. G. C. Brooke, then Acting Deputy Keeper at the Department of Coins and Medals, British Museum, where the hoard was originally examined in 1931.³

SILVER

ENGLAND

Philip and Mary (1554-8)

- | | | |
|---|---------------|---|
| 1 | Groat, 1554-8 | 1 |
|---|---------------|---|

Elizabeth I (1558-1603)

- | | | |
|---|-------------------------------|---|
| 2 | Sixpence, mm. eglantine, 1575 | 1 |
|---|-------------------------------|---|

¹ Joan Evans, *English Posies and Posy Rings* (1931), 50. In a letter, dated 20 March 1960, Dr. Evans tentatively dates this ring to the period 1650-75. Robert Day, the Cork antiquarian, made a collection of such rings and had no fewer than 170 which he listed in *Journ. Roy. Soc. Antiq. Ireland*, xvi (1884), 61; xvii (1888), 406; and xxii (1892), 63. He says he picked them up in Scotland, the south of England, and the greater part of Ireland.

² Original list was published by G. C. Brook in *N.C.* 5th ser., xii (1932), 70-71.

³ I am grateful to Mr. F. J. Falkiner, Assistant Secretary of the Ministry of Finance, Northern Ireland, for allowing me access to the various files in the Ancient Monuments branch, giving details of this and hoards I and III. The first report of this find appeared in the *Banbridge Chronicle*, 28 Feb. 1931.

Charles I (1625-49)

3	Shilling, mm. sun, 1645-6	1
4	Sixpence, mm. tun, 1637-8	1

SCOTLAND

James VI (1567-1625)

5	Quarter thistle merk, 1602	1
---	----------------------------	---

Charles II (1660-85)

6-10	Merks, 1664 (1); 1670 (1); 1671 (3)	5
------	-------------------------------------	---

FLANDERS

Philip IV of Spain (1621-65)

11	Quadruple Ducaton, 1654	1
----	-------------------------	---

SPAIN AND SPANISH AMERICA

Philip IV (1621-65)

12, 13	Eight reals, 163(-); 1662, Potosi mint	2
14	Two reals, 1656, Potosi mint	1

Charles II (1665-1700)

15	Four reals, date uncertain, Potosi mint	1
16-18	Cut pieces of seventeenth-century date	3

FRANCE

Louis XIV (1643-1715)

19	Four Sols, 1677	1
----	-----------------	---

UNKNOWN

20	A 'very small' coin, lost by finder	1
----	-------------------------------------	---

Total 20

It should be noted that the latest dated coin is the French piece of 1677, and that the composition of this hoard runs fairly close to that from Dundonald although there is no such clear-cut division in the dating of the English, Scottish, and continental coins. Both find-spots are in the area where Flemish and French weavers settled in Co. Down during this period. Coins of France, Spanish Empire and United Provinces, &c., are those which French Huguenots might most easily have acquired in the sale of their possessions and on their passage to Ulster by way of Flanders, Holland, and Scotland.¹

¹ Professor Sir Douglas Savory in a letter to the writer, dated 19 Aug. 1961, says: 'The earliest date that we have of a settlement of Huguenots in Ireland is that of the Glass manufactory set up in 1623 at Birr, in King's County, but it was not till 1661 that, on the death of Mazarin, Louis XIV began his persecutions of the Huguenots, which of course culminated in the revocation of the Edict of Nantes in 1685. The first large influx of Huguenots was due to the Act passed in 1662 under the influence of the Duke of Ormonde who was Viceroy of Ireland and got a law passed to encourage the settlement of the Huguenots in Ireland. The first Huguenot Church established in Dublin was in 1666. Most of the Huguenots arrived direct in Ireland from France, though several came from Holland. Most of them must have brought a considerable amount of money with them, because they almost immediately set up industries such as the manufacture of poplin in Dublin. My own ancestors came direct from Montpellier . . .'

V. CAPANAGH TOWNLAND, Co. Antrim, 1894

A collection of coins was purchased by the Belfast Museum from Brigadier J. Y. Calwell, Helen's Bay, Co. Down, in October 1955. These were originally collected by his father and they contained a number of pieces said to have been found 'on taking down an old farm house at Capanagh'. The Calwells had property at Ballyboley nearby which had come into the possession of the family through the Brigadier's great-grandfather, Alexander Macdonald of Annadale Hall.¹ It is quite probable, therefore, that the coins were handed to Robert, John or William Calwell by an estate tenant in 1894.

The deposit is a curious one; it suggests that the coins were hidden about the time of the Civil War in Ireland (1688-90) judging by the almost unworn condition of the Portuguese piece. This coin contrasts markedly with the somewhat worn and much corroded copper Irish halfpennies of Charles II. The shilling of this king, included in the brief list given on the envelope containing most of the coins, has not been traced. This hoard is perhaps more truly a result of the extreme measures taken by James II in issuing 'gun-money' token coinage to pay for the Irish campaign; note for instance the complete absence of any contemporary coins of the Catholic monarch, either English, Irish, or Scottish.

SILVER

ENGLAND

Elizabeth I (1558-1603)

- | | | |
|---|---|---|
| 1 | Sixpence, mm. coronet, 1569 ² (40 gr.) | 1 |
|---|---|---|

Charles II (1660-85)

- | | | |
|---|-----------------------|---|
| 2 | Shilling ³ | 1 |
|---|-----------------------|---|

PORTUGAL

Peter II (1683-1706)

- | | | |
|---|---|---|
| 3 | Four-hundred reis or crusadoe, 1687. <i>Obv.</i> crowned royal arms. <i>Rev.</i> voided Maltese cross; beaded and cable edge (260½ gr.) | 1 |
|---|---|---|

COPPER

IRELAND

Charles II

- | | | |
|-----|---|---|
| 4-9 | Halfpennies; large letters, 16 strings to harp, 1680 (104 gr.) (1); large letters, 15 strings to harp, 1680 (104 gr.) (1); large letters, 12 strings (?), 1681 (103 gr.) (1); small letters, 12 strings (?), 1682 (180 gr.) (1); small letters, 14 strings, 1683 (115 gr.) (1); small letters, 12 strings, 1683 (?) (89 gr.) (1) ⁴ | 6 |
| | Total | 9 |
| | | = |

¹ Notes kindly supplied by Brigadier Calwell.

² This is presumed to be the one mentioned as it is now the only Elizabethan sixpence in the Calwell collection. It was not, however, grouped with the other coins in the envelope.

³ Not traced amongst the coins in the Calwell collection; it is not beyond the bounds of possibility that the coin intended was really a Scottish merk or quarter-dollar as in other hoards.

⁴ A halfpenny, small letters, 11 strings (?), 1683 (?) weighing 74 gr. and showing considerable wear, was also in the Calwell collection but it did not happen to be in the envelope with other pieces from Capanagh, so it has been omitted from the list.

TWO GOLD HOARDS FROM NORTHERN IRELAND

By W. A. SEABY

IN Ulster, hoards of gold coins are comparatively rare and none has been traced earlier than the seventeenth century.¹ Indeed it can safely be stated that since gold coinage was not struck in, or for, Ireland, except during the period of the Great Rebellion when a limited number of pistoles was issued as money of necessity in Dublin during 1642-3,² payment in this metal was never common until trade had markedly expanded in the larger towns and cities during the Hanoverian period. Shortage of English silver coinage in the reign of George III may well have brought about the general employment here of guineas and half-guineas in the latter part of the eighteenth century.

Thus the traditional and evasive 'crock of gold' had perhaps more than a fanciful significance in Irish rural life. Anyone who could save up enough 'against a rainy day' was in a good position to bargain with his neighbour, do business on credit, and take over a lease of land or property, even though his bullion reserve might never actually have changed hands during his lifetime. If things went against him he could always emigrate and start again in a new country.

The two hoards listed below are evidence of just this form of economy; each from its size, spread of dates, and method of deposit, probably represents the savings of one or, at most, two generations. The condition of the gold is such that the coins appear to have been put away singly or a few at a time; some of the earlier pieces being in as good or even better state than those of later dates. It is unlikely that this would have been the case had the hoards been assembled rapidly from coins in general circulation.

I. TULLYNEWBANE, Glenavy, Co. Antrim, 1954

On Easter Monday, 19 April 1954, Mr. George S. McClure was carrying out reconstruction work on an old partly demolished cottage, adjacent to his present residence at Tullynewbane, when he found thirty-two gold coins on the top of a cupboard. This press, which was built into the wall at the foot

¹ Amongst finds of gold coins in Ulster known to the writer are: angel of Henry VII, i.m. pansy (1495-1504), dug up behind the walls of Carrickfergus in 1608, now in Belfast Museum collection, ex Rev. Snowden Cupples and R. Johnson-Smith collections; a gold pistole, Inchiquin money, found near Belfast about 1840, ex Carruthers collection (*Ulster Journ. Archaeol.* i (1853), 164); nine gold coins, almost as perfect as when coined, of Charles II and James II (1679-88), discovered in Sept. 1849 by a workman, employed in the improvement of the Newry Canal, Co. Down, who sold them to a jeweller in Newry for a sovereign each (*Journ. Roy. Soc. Antiqs. Ireland*, iii (pub. 1856), 372); eleven gold coins of Charles I, James II, William III, Anne, George I, and John V of Portugal (1706-50), found at Abbey-side, Dungannon, Co. Tyrone, in 1852; a tea-cup filled with French and Spanish gold coins discovered in the thatch of an old house near Newtownards, Co. Down, in 1820 (*U.J.A.* i (1853), 166-7). Other more enigmatic finds are not given here.

² G. Coffey, *Catalogue of the Irish Coins in the Roy. Irish Acad.*, part ii, Anglo-Irish (Dublin, 1895), 91; H. A. Grueber, *Handbook of Coins of Great Britain and Ireland in the B.M.* (1899), 235. Dr. William O'Sullivan with further evidence thinks that these pistoles may have been issued about 1646.

of the stairs, reached to the level of the roof so that the coins may have fallen out of the thatch. The owner of the cottage had lived there from birth to 1951, and it had been in his family's possession since 1870. Previous to this date the house had been owned by Hugh Edgar, who died in 1872 aged 67 years.

The coins were handed to the police on 12 May 1954 and an inquest on the find was held at Crumlin courthouse by the local coroner, Dr. H. Baird, on 25 May. The jury found that the hoard consisted of twenty-eight gold guineas and four half-guineas, that the coins were discovered by Mr. McClure and that the owner was unknown. Thereafter the Northern Ireland Ministry of Finance took possession of the pieces as treasure trove.¹ The coins having been valued by the Keeper of the Department of Coins and Medals at the British Museum, an ex-gratia payment of £120 was made to McClure: and the hoard was placed on public exhibition at the Belfast Museum and Art Gallery in August 1954.

Two other hoards of eighteenth-century English gold pieces which have turned up in Ireland may be cited. One reported by Carruthers, also to the value of thirty guineas of George III, was discovered at Castle Connel, Co. Limerick, in 1848.² A more recent example was that found during digging operations on the farm of Mr. H. Arnold, Beechvale, Crumlin, Co. Antrim, in 1937. Here there were eleven guineas, five dating between 1772 and 1781, and six of 'spade' type 1787 to 1791, which places this deposit close in date to the Tullynewbane hoard.³

The '98 Rebellion might appear to be the most obvious cause for non-recovery of the two Ulster hoards were it not that the breaks in the sequence of the coins are more consistent with the beginning of the French Revolutionary War in 1792 after which date thousands went into military or naval service, never to return to their homes. It is worth noting that three of the Tullynewbane coins were bent: one spade guinea of 1794 and two half-guineas of 1788 and 1789. These had almost certainly been used as love tokens, a practice much in vogue in the eighteenth century.

GOLD

BRITAIN

George III (1760-1820). Guineas

- | | | |
|------|---|----|
| 1-3 | Third head by Richard Yeo. Ornate shield of royal arms, crowned, 1766, v.f. (1); as last, 1772, f. (1); 1773, f. but scratched on obverse (1) | 3 |
| 4-18 | Fourth head by Thomas Pingo. <i>Rev.</i> as no. 1. 1775, e.f. (2); v.f. (3); f. (1); 1777, v.f. to f. (1); 1781, f. to v.f. (1); fault in die of 1, f. (1); 1782, almost v.f. (1); f. (1); 1785, v.f. (2); v.f. to f. (1); 1786, e.f. (1) | 15 |

¹ Reported in the *Belfast Telegraph*, 18 May 1954; details of the inquest in the *Belfast News-Letter*, 26 May 1954. Mr. McClure, through his solicitor, contested the Crown's claim to the coins but he did not take the matter to Court.

² *Ulster Journ. Archaeol.* i (1853), 165.

³ Recorded in the files of the Ancient Monuments Branch of the Northern Ireland Ministry of Finance, Law Courts, Belfast, where four of the guineas are now housed. The other coins were returned to the owner, Mr. H. Arnold, who was paid £8 for the guineas retained by the Ministry. Dr. T. S. Agnew informs me of another hoard of 'spade guineas' said to have been found in an outhouse at Harrybrook, Tandagree, Co. Armagh, possibly about the beginning of the present century, but I have been unable to discover anything about it.

PHOTOGRAPHY OF COINS IN MONOCHROME AND COLOUR ON 35 mm. FILM

By C. WILSON PECK

THE purpose of this paper is to provide a practical working scheme for photographing single coins or small groups of coins either in black and white or in colour, primarily for the production of 2×2 in. lantern slides.

To photograph coins effectively it is necessary to work at a lower scale of reduction than is normally possible with the average camera, the lens mount of which usually has insufficient movement for focusing closer than about 3 feet. The standard lens fitted to many of the best 35-mm. cameras is usually of 5 cm. focal length. Such a lens when focused at 3 feet gives a ratio of reduction of about $1 : 20$, i.e. the object (say a coin) will appear $\frac{1}{20}$ its actual size on the film. If taken with a high-quality lens the image at this scale of reduction, though it may be well defined, will be too small for ordinary visual observation, and will break down rather badly if subjected to high magnification as when projected at 30 or more diameters on to a screen.

Almost any camera can be made to give a lower ratio of reduction, and so make the image larger than $1 : 20$, by means of positive supplementary lenses of various focal lengths attached to the front of the camera lens, but unfortunately this method cannot be used for focusing much closer than about 8 inches, at which distance a 5-cm. lens gives a ratio of reduction of about $1 : 4$, which only touches the fringe of the useful range of reductions needed for most coin work. Hence, supplementary lenses have only a very limited use for the work under discussion, and as they also cause some loss of definition, especially near the edges of the picture, they will not be considered further.

For really first-class work, including the ability to photograph a coin, or part of a coin, at any desired ratio of reduction or magnification, it is necessary to increase the extension of the lens, that is, to increase the distance between the lens and the film. So far as the 35-mm. camera is concerned this means that the lens must be detachable so that the required extension tubes or bellows can be inserted between the lens and the camera body.¹

As the distance between the lens and the film is increased the ratio of reduction diminishes until, at a point where the extension equals twice the focal length of the lens, we reach a ratio of $1 : 1$, the image appearing natural size. Beyond this point further extension yields a magnified image, but for various optical reasons the use of camera lenses at the very long extensions needed to yield magnifications greater than about $10 \times$ is not recommended. Such higher magnifications require the use of the microscope lens and we then enter the field of photomicrography. In the writer's experience a magnification of $5 \times$ is about the highest that is ever required for coin work, the really useful range being from $1 : 4$ to $4 \times$.

¹ Some larger cameras of the bellows type are fitted with rackwork focusing giving double, and sometimes triple, extension, enabling objects to be photographed at $1 : 1$ and $2 \times$, respectively.

19-28 Fifth head by Lewis Pingo. Spade-shaped shield of royal arms, crowned, 1787, v.f. (1); 1788, v.f. (1); almost v.f. (1); 1791, v.f. to e.f., but marked on the face (1); v.f., marked on face (1); 1792, f. to v.f. (1); 1793, almost e.f. (2); 1794, almost e.f. (1); v.f. but bent (1)	10
--	----

Half-guineas

29-32 Fifth head by Lewis Pingo. Spade-shaped shield of royal arms, crowned, 1788, f. but bent (1); 1789, f. but bent (1); 1793, v.f. (1); 1794, e.f. (1)	4
Total	<u>32</u>

II. MULLINABRONE, near Garvagh, Co. Londonderry, 1958.

This hoard, even lower in value than Tullynewbane, being worth only £20 sterling, was discovered on 12 April 1958 by Mr. John G. Barkley, agricultural inspector of Gortinmayoghill, while cleaning up part of a gable which had fallen at an old dwelling-house in Mullinabrone. While carrying out this work with his tenant, Mr. Patrick Mullan, Barkley disturbed some of the old roof above the entrance door and discovered lying on the ceiling a small tin box which he thought had fallen out of the thatch. Inside the box was a cloth bag containing the money; this he handed to the local police. At an inquest held on 30 April, conducted by the coroner for North Derry, Mr. A. E. Martin, a jury found that the owner of the hoard was unknown.¹ As treasure trove the sovereigns were seized by the Ministry of Finance on behalf of the Crown, the finder ultimately receiving the full market value of £85 as an ex-gratia payment.

In this instance there are 36 coins altogether, 4 being sovereigns and 32 half-sovereigns. They range from 1848 to 1911, but these dates are misleading since only four coins show the young head of Victoria, the other seventeen of the queen lying between 1890 and 1901. The remaining fifteen pieces are of Edward VII and George V, two only being of the latter king. The condition of the coins generally is very good but the half-sovereign of 1848 is fairly worn and some of the late Victorian pieces show that they had been in circulation at least for a few years before deposit. One might fairly say that the coins represent the savings of one generation, possibly with a carry-over from a parent.

If this is a First World War hoard, such as that found in an old well at Haselbury Plucknett, near Yeovil, Somerset, in 1951,² it is perhaps odd that the coins are not continuous up to 1914, when gold coinage was largely replaced by the Bradbury Treasury notes. The mint state of one of the 1911 half-sovereigns proves that it can scarcely have been pocketed after leaving the bank; and one would imagine the hoard had virtually not been touched beyond that date and its recovery some four years ago. All coins were issued by the Royal Mint.

¹ Reported in the *Belfast News-Letter*, 2 May 1958.

² *N.C.* 6th ser., xi (1951), 134-5. Dolley points out that the later coins in this hoard are almost all half-sovereigns as in the present case. The rate of accretion from 1890 to 1913 at Haselbury Plucknett is approximately 25s. per annum; that at Mullinabrone from 1890 is about 16s. per annum.

GOLD

BRITAIN

Victoria (1837-1901). Sovereign, 1865

1	Young head l. Royal arms. Die No. 33	1
---	--------------------------------------	---

Half-sovereigns

2	Type as No. 1, 1848	1
---	---------------------	---

3, 4	Slightly older head l., 1883 (1); 1885 (1)	2
------	--	---

5-8	Jubilee head l. Royal arms, 1890 (1); 1892 (3)	4
-----	--	---

9-21	Old veiled head l. St. George and dragon, 1893 (2); 1894 (2); 1895 (3); 1896 (1); 1897 (1); 1898 (1); 1899 (1); 1900 (1); 1901 (1)	13
------	---	----

Edward VII (1901-10). Sovereigns

22-24	Bare head r. St. George, 1905 (1); 1907 (1); 1910 (1)	3
-------	---	---

Half-sovereigns

25-34	Type as sovereign, 1902 (1); 1904 (2); 1905 (2); 1906 (2); 1907 (1); 1908 (2)	10
-------	--	----

George V (1910-36). Half-sovereigns

35, 36	Bare head l. St. George, 1911	2
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Total	<u>36</u>
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It is advisable, at this point, to correct the erroneous belief held by many who are inexperienced in the problems of magnification—that the higher the magnification the more one ‘sees’. The golden rule of the microscopist is to use the *lowest* magnification that will enable him to see adequately all that he *wants* to see. By increasing the magnification beyond this point the image reveals nothing new; the image is merely larger and less sharply defined.

The next requirement is a ground-glass screen on which to focus the image. Several of the more costly 35-mm. cameras have a reflex focusing system built in; others have provision for a reflex attachment, or can be used with a sliding-focusing mechanism.¹ Either method gives equally good results. The ability to focus the image on a screen solves practically all the remaining optical requirements, e.g. (1) focusing can be done with almost microscopical precision, (2) the image can be placed accurately within the film area, i.e. parallax errors are eliminated, and (3) the depth of field can be observed and adjusted visibly if necessary.

Another necessary part of the equipment is a rigid stand on which to support the camera with the lens facing vertically downwards, and with provision for raising or lowering it and fixing it at the required height. Almost any vertical enlarger stand can be adapted for this purpose provided the enlarger head can be removed from the carrying arm. Some manufacturers supply separate carrying arms specially for this close-up work.

Before embarking on close-up photography it is important to realize that there are several rather complicated factors to contend with which normally one does not meet with in ‘ordinary’ photography, and consequently, unless one adheres rigidly to a predetermined standardized procedure worked out on the lines to be described, little success will be achieved. The beginner will be well advised, therefore, to become proficient in the use of monochrome film before venturing with colour.

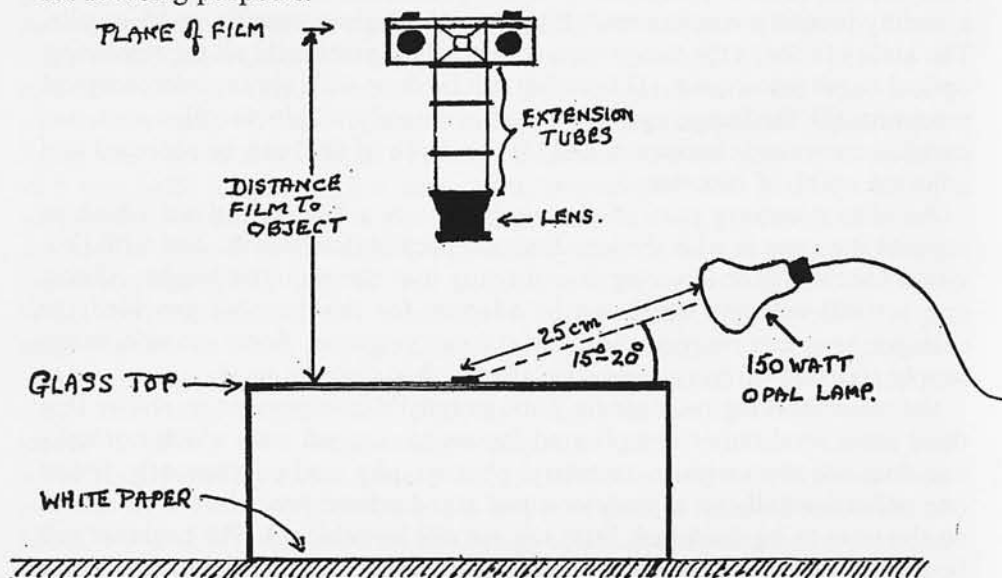
A simple sketch showing the arrangement of the essential apparatus appears below, and all the necessary working data for both black and white and colour is set out in the table on p. 351. The details given in this table will now be explained and discussed, column by column.

Ratios of reduction or magnification (see table, col. 1). As previously stated the ratios 1 : 4 to 4 × are ample for most purposes. Thus a medal very nearly 4 inches in diameter can be photographed in its entirety at 1 : 4, while at 4 × the date on a Victorian bronze penny will appear enlarged to almost the full length of the 35-mm. frame. As it is very desirable to make the fullest use of the available film area no matter whether an entire coin, or only a selected part of one, is to be photographed, it is obvious that the more ratios one can work to the better. Actually, the writer uses 21 ratios in all, but for this article the 13 ratios listed were considered sufficient. When a number of coins are to be photographed at various ratios it is a good plan to make a list in advance of the ratio required for each piece and then to rearrange the list so that all those at the same ratio will be taken consecutively. This obviates frequent changing of the lens extension and camera height, and lessens the possibility of mistakes.

¹ Leica 1g, M2 or M3; Zeiss Ikon Contax or Contarex; Alpha Reflex; Wrayflex; Exacta; Periflex; Edixa, &c.

Lens extension (see table, col. 2). These figures represent the length of the extension required for a lens of 5 cm. focal length for each of the ratios in col. 1. Thus at $1.5 \times$ a 5-cm. lens requires an extension of 7.5 cm., i.e. the lens will then be $5 + 7.5 = 12.5$ cm. from the film.

The most convenient way of obtaining variable lens extension is to use a focusing bellows attachment as made for the Leica and certain other 35 mm. cameras, but a set of extension tubes of assorted lengths is perfectly satisfactory provided one of the tubes (the shortest) is adjustable in length for focusing purposes.



Now, extension of the lens introduces the first complication. Theoretically, the f -numbers or stops marked on a lens only hold good when the lens is focused at infinity (∞), though in practice these f -numbers can safely be used throughout the normal focusing range of the lens. When, however, the lens is extended beyond this limit, as it has to be for close-up work, the effective value of the f -number diminishes according to the inverse square law. Thus with a lens extended to twice its focal length (i.e. $1 : 1$), an aperture of say, $f/4$ will only be as effective as $f/8$, and consequently if the aperture were to be set at $f/4$ the exposure would have to be increased four times. As the exposure times given in the table, cols. 5 and 6, have all been increased by the calculated amount to compensate for their diminished stop values, the lens aperture has simply to be set normally as directed in the table.

Distance from plane of film to object (see table, col. 3). To obtain the desired rates of reduction it is necessary, not only to extend the lens by the required amount, but also to set the camera at a specified distance from the object as indicated in col. 3. These distances are to be measured from the plane of the film to the upper surface of the coin. As the plane in which the film lies in the camera is not usually indicated, its position must be estimated as accurately as possible and marked. Obviously this will most easily be done while a roll of film is being inserted.

1	2	3	4	5			6		
Ratio of reduction or magnification	Extra extension required for 5-cm. lens	Distance from plane of film to object	Size of field	(1) MONOCHROME Film: Panatomic X. Lighting: 150 watt, 240 volt Opal lamp, set 25 cm. from object at 15°-20° angle of incidence from horizontal.			(2) COLOUR Film: Kodachrome II 'A'. Filter: Gevaert CTO4 on lens. Lighting: 275 watt 220/230 volt Philips no. 1 Photolita lamp, run at 230 volts, and set 25 cm. from object, at 15°-20° angle of incidence from horizontal.		
				Tone of object			Tone of object		
	cm.	cm.	cm.	DARK	MEDIUM	LIGHT	DARK	MEDIUM	LIGHT
				Exposure in seconds at f 8			Exposure in seconds at f 18		
1 : 4	1.25	31.25	9.6 × 14.4	4	3	2	5½	4	2
1 : 3	1.65	26.65	7.2 × 10.8	4½	3½	2½	6	4½	2½
1 : 2.5	2.0	24.5	6 × 9	5	4	3	7	5	3
1 : 2	2.5	22.5	4.8 × 7.2	6½	5	3½	8½	6½	4
1 : 1.5	3.35	20.85	3.6 × 5.4	8	6	4	9	7	4½
1 : 1.25	4.0	20.25	3 × 4.5	12	9	5½	9½	7½	4½
1 : 1	5.0	20.0	2.4 × 3.6	15	12	7	10½	8	5
			mm.	Exposure in seconds at f 10			Exposure in seconds at f 10		
× 1.25	6.25	20.25	19.2 × 28.8	20	15	9	5	4	2½
× 1.5	7.5	20.85	16 × 24	26	20	12	6½	5	3
× 2	10.0	22.5	12 × 18	40	30	18	14½	11	6½
× 2.5	12.5	24.5	9.6 × 14.4	50	38	23	23	17	10
× 3	15.0	26.65	8 × 12	60	46	28	31	24	14
× 4	20.0	31.25	6 × 9	88	68	40	65	50	30

DARK=Very darkly toned copper or bronze; dark bronzed copper.

MEDIUM=Moderately toned copper or bronze; dull silver, tin or brass.

LIGHT=Gold; bright silver, copper or bronze; nickel; platinum.

Size of field (see table, col. 4). These figures represent the actual area of the object which will completely fill the 35-mm. frame at the various ratios. They enable the most suitable ratio of reduction or magnification to be determined for each photograph without resorting to tedious trials on the focusing screen.

Black-and-white film (see table, col. 5).

(a) *Choice of film.* As resolution of fine detail is the main consideration, especially if projection is contemplated, a relatively slow, fine-grain film giving fair contrast will be required. There is nothing to be gained but much to lose by using a fast film. Kodak Panatomic X (B.S.I. 25°) is very suitable, and, in fact, all the data given in col. 5 applies to this film.¹

Lantern slides are made from the resulting negatives by contact printing in the usual manner, but for those wishing to produce 2×2 in. lantern slides as quickly and cheaply as possible, a black-and-white *reversal film*, such as Gevapan Dia-direct 26 (B.S.I. 25°) is very suitable and can be used exactly as for Panatomic X. The Dia-direct film is processed by reversal by the makers, and the resulting *positives* are mounted directly between 2×2 glasses exactly as for colour film. One slight disadvantage of this method is that each positive yields only one slide. It is also possible that, with prolonged projection, the heat may buckle the film. However, with increasing numbers of projectors appearing on the market equipped with low wattage lamps the heat problem is rapidly diminishing.

(b) *Light Source.* Daylight is not really suitable for coin photography, partly because it is so liable to rapid change both in its intensity and its colour temperature²—two very troublesome variables—and also because it tends to yield 'flat' negatives. Ordinary (household) half-watt tungsten light is both suitable and usually readily available. It is advisable to run in a new lamp for 24 hours or longer to ensure a reasonably constant light output during future use. It is most important that the lamp should always be set at the same distance from the coin, and it is equally important that the angle at which the light strikes the coin should also be constant. If, for some special reason, the lamp has to be moved nearer to or farther from the coin, it must be remembered that light intensity varies inversely as the square of the distance. Thus, if the distance is increased, say, from 25 cm. to 50 cm., still maintaining the same angle of incidence, the exposure will have to be increased (theoretically) four times. Unfortunately the inverse square law only works out accurately for a theoretical point source of light, hence a trial exposure at the increased distance is advisable. The necessity to keep the light angle constant is due to the fact that the intensity of the light reflected from an object varies considerably with the angle at which the light strikes the object. Flat lighting, i.e. with the light pointing directly downwards from a position close to the lens is the most intense, but if the light is directed at an angle of

¹ As alternatives, Ilford Pan F (B.S.I. 25°); Perutz Pergrano (B.S.I. 24°) or Gevapan 27 (B.S.I. 26°) may be used, but a slight adjustment in the exposures would be necessary if either of the last two were chosen in place of Panatomic X.

² Slight colour temperature variation has little or no noticeable effect on black-and-white film, but in colour work it can be disastrous.

45° to 70° from the vertical it is less intense and the exposure will need to be about double. Between 70° and 90°, about four times the exposure may be necessary. With care, flat, frontal lighting can produce excellent pictures, but the angle which the writer has found most generally satisfactory lies between 70° and 75° (i.e. 15° to 20° from the horizontal). This angle of illumination gives a considerable modelling effect due to the formation of shadows across the coin, and probably produces the most 'life-like' pictures, especially in colour.

By now it will be obvious that considerable errors in exposure will occur unless the distance, the intensity, and the angle of incidence of the light are standardized and rigidly maintained at all times. As the light intensity is also dependent on the voltage the lamp should always be run as nearly as possible to its rated voltage. In practice, however, a deviation of + or - 10 volts has little noticeable effect on exposure when using black-and-white film.

The standard light used by the writer consists of one 150 watt, 240 volt Mazda *opal* lamp in a reflector, the inside of which has been completely blackened. It is set 25 cm. from the coin (measurement being made from the front of the lamp), at an angle of 15° to 20° *from the horizontal*. This combination of wattage and distance was found to give reasonably short-time exposures in conjunction with suitable lens apertures. It must be borne in mind that, with the lamp at such a short distance, any attempt to crowd in too many coins at a ratio of 1 : 4 may result in slight under-exposure of those coins farthest from the light, and slight over-exposure of those nearest to it, because at this short distance the effect of the inverse square law is very noticeable.

(c) *Reciprocity failure*. To those photographers who seldom have occasion to use exposures longer than about 1 second the effect of reciprocity failure on long-time exposures comes rather as a shock. The writer quite unashamedly admits that his early failures to obtain satisfactory photographs of coins was largely due to under-exposure brought about by reciprocity failure. A few remarks on this complicated and disturbing phenomenon are therefore essential.

Photographic exposures are commonly made on the assumption that the reciprocal law holds good over the whole range of possible shutter-speed/aperture combinations, but in fact this law only holds good for exposures between roughly $\frac{1}{500}$ second and 1 second. Exposures beyond these limits yield under-exposure unless compensation is made for the effects of reciprocity failure.

Thus, other things being equal, exposures of $\frac{1}{40}$ sec. at $f 4$, $\frac{1}{20}$ sec. at $f 5.6$ or $\frac{1}{10}$ sec. at $f 8$ will each yield a negative of the same density, but exposures of $\frac{1}{300}$ sec. at $f 1.4$ or 2 sec. at $f 36$ —both of which are theoretically equivalent to the first three—will yield under-exposed negatives.

Fortunately tables exist giving the approximate increases in exposure required to compensate for reciprocity failure. From the following examples it will be seen that the compensation needed becomes disproportionately greater as the exposure increases, and that for colour it is appreciably less than for black-and-white film.

Approx. R.F. compensation for average black and white film:

<i>Indicated exposure</i>	<i>Required exposure</i>	<i>Factor</i>	<i>= Increase of</i>
4 seconds	6½ seconds	1.625	62.5%
8 "	16 "	2.0	100%
20 "	50 "	2.5	150%
30 "	85 "	2.83	183%
40 "	124 "	3.1	210%
60 "	210 "	3.5	250%

Approx. R.F. compensation for average colour film:

4 seconds	5¾ seconds	1.44	44%
8 "	13 "	1.625	62.5%
20 "	40 "	2.0	100%
30 "	68 "	2.27	125%
40 "	104 "	2.6	160%
60 "	180 "	3.0	200%

(d) *Focusing and depth of field.* Theoretically a lens gives absolute sharpness of focus only in one plane, but as the lens aperture is progressively closed down acceptable increasing degrees of sharpness are obtained in front of and behind this plane. At a ratio of reduction of 1 : 4 and using an aperture of $f/8$, sharp focus will extend to a depth of about $\frac{1}{3}$ of an inch, which is more than ample for any coin likely to be taken at this ratio. As the ratio is decreased, passing through 1 : 1 to increasing degrees of magnification this figure rapidly diminishes until, at $4\times$, sharp focus will only be obtainable to a depth of very approximately $\frac{1}{100}$ of an inch. As the vast majority of coins have fairly flat surfaces focusing presents little difficulty, but extra care is necessary when working at $2.5\times$ to $4\times$ to ensure that the available depth of field is properly utilized.

Focusing should always be done with the lens aperture fully open, firstly because focusing is much more sensitive and accurate at maximum aperture, and secondly because the increased light which it passes enables the image to be more easily seen. Correct focus having been obtained, the aperture is closed down to the stop indicated in the table. If a filter is to be used focusing must be done with the filter in position over the lens.

Focusing at 1 : 1 may at first be a little confusing to the beginner because, being as it were at the neutral point between reduction and magnification, little difference is apparent in the sharpness of the image over quite a wide range of focusing either side of the absolute focus. Actually a slight error either way makes little difference to the sharpness of the picture, but obviously the reduction ratio will not be precisely 1 : 1.

(e) *Positioning of coin.* When photographing a single coin it should be placed so that the image lies exactly in the centre of the rectangular ground glass screen. This facilitates the use of a ready-made square mask when making the lantern slide, and also ensures accurate centration on the projection screen. When using low-angle cross lighting the coin must be so placed that the light casts at least some shadow from those details which it is particularly desirable to reproduce very clearly. If, for example, the reverse of a current penny is inadvertently positioned so that the light illuminates the spear shaft end on (i.e. with the light running down the length of the shaft) only a very faint image of the spear will appear in the photograph. Likewise, if an important

line flaw is illuminated in a similar manner it may not show up at all. Ideally the lamp should therefore be capable of being swung round the coin through at least half a circle at a constant radius from the coin, but if this is not possible, it is a simple matter to twist the coin round, 45° at a time, until a suitable position is found.

The portrait side of a coin is best placed with the face nearest the light: if taken the reverse way round, and the portrait happens to be in rather high relief, shadows may spoil the profile. It often happens also in the case of high relief busts that the back of the head and the shoulder are practically unilluminated owing to the low angle of the light. With care this can be partially remedied by standing a white paper reflector (about 3 inches long and $\frac{1}{2}$ inch high) approximately 2 inches from the coin on the side farthest from the light. On no account should the reflector be higher than 1 inch as it would then reflect too much light back across the coin, thereby partly neutralizing some of the essential shadows produced by the main lighting.

During the process of positioning and focusing the coin it is important to watch for any disturbing light reflections. It is surprising how easily those can pass unnoticed until after the film has been processed. A slight alteration in the angle of the light is usually the most effective remedy.

Dust and tiny pieces of fluff should be removed from the surface of the coin just before making the exposure. Fluff, if allowed to remain, often shows up so conspicuously as to ruin the picture, especially if it is in colour.

(f) *Elimination of side shadows.* Low-angle cross lighting inevitably casts an unsightly shadow on the background at the side of the coin farthest from the light. This could be blocked out in the usual way, but it is much simpler to eliminate it from the start. A successful method, which the writer has used for many years, is to photograph the coin on a sheet of glass raised several inches above the bench. This is easily arranged by placing the glass on an open-topped rectangular box, the inner sides and bottom of which are lined with white paper. The area of the glass should be at least 10 inches \times 8 inches, and the box must be not less than 4 inches deep inside. With this device the bottom of the box provides the white background for the coin whose shadow is cast *sideways* on to the far side of the box so that it does not appear in the photograph. In the resulting picture the coin appears as if suspended in space, there being no shadow or background of any kind to distract the attention.

(g) *Exposure.*¹ All the factors that must be taken into account when deciding on the exposure have now been discussed, except one—the coin itself. Photographically coins differ considerably according to their metal and the degree of toning they have acquired. Obviously, a silver coin in brilliant, untuned condition will require less exposure than a very darkly toned copper piece. Needless to say there are many intermediate tones between these two extremes, and as, theoretically, each will require a different exposure, the correct one is not easy to determine.

Tests made in an attempt to simplify this problem proved that any number of coins of assorted metals and different tones could be fairly accurately

¹ The use of a photo-electric meter for determining exposure was found to be impracticable for several reasons.

graded into three groups—*dark*, *medium*, and *light*, and further, that for each of these groups a tentative exposure could be allotted.

These groups are as follows:

Dark—Very darkly toned copper or bronze; dark bronzed copper.

Medium—Moderately toned copper or bronze; *dull* silver, tin, or brass.

Light—Gold; *bright* silver, copper, or bronze; nickel; platinum.

The exposures required for each of these groups at the various ratios appear in col. 5. As these exposures include the necessary compensation for lens extension and reciprocity failure, it only remains to decide to which category each particular coin belongs. A little practice will undoubtedly be required to do this with sufficient accuracy, but as very dark (virtually black) copper and untuned silver can be taken, respectively, to represent the two extremes, *dark* and *light*, the only real problem is to decide which are the *medium* tones midway between these two.

When deciding on the category of a given coin it is important to judge it solely on its *brightness*; its actual colour is not of great significance. For instance, in the medium group, moderately toned copper is equated with dull silver, although these colours are quite different.

Of course, all coins do not fall precisely into one of these three main groups; they frequently come in between, but as will be seen from the exposure table, the range of exposure between *dark* and *medium*, and between *medium* and *light* is relatively small, so that it is a fairly simple matter to judge these intermediate exposures. Suppose, for example, one is working in monochrome at $\times 1.5$. Reference to col. 5 shows that the exposure required at $f8$ lies somewhere between 26–(20)–12 seconds according to the brightness of the coin. If it is judged to be a little darker than *medium* the exposure will probably be 22 or 23 seconds. If, on the other hand, the coin is midway between *medium* and *light*, the required exposure is 16 seconds. After a few trials little difficulty should be experienced in arriving at the correct exposure for monochrome film, especially as relatively large errors will be taken care of by the latitude of the film.

Colour (see table, col. 6). All the main principles and technical details described for black and white film apply also to colour, with one important exception—the light source. Different light sources vary not only in their *intensity* but also in their colour composition, or *colour temperature* as it is usually termed.

In colour photography, a true colour rendering will only be obtained if (1) the exposure is correct, and (2) the colour temperature of the light source used corresponds with that for which the colour film is balanced. It must be stressed that exposures for colour need to be more accurate than for black and white. Even with perfect colour balance between light and film, the colour rendering can be spoilt by an error in exposure equivalent to as little as $\frac{2}{3}$ of a stop.

Now the colour temperature of daylight varies over a wide range under differing sky conditions, and also at different times of the day; in fact it is apt to fluctuate considerably during a period of only a few minutes, especially if there are clouds on the move, or when there is mist about. The effect of

slight unbalance in colour temperature for ordinary out-door colour photography is usually acceptable, or may even pass unnoticed, but for photographing coins a correct colour temperature balance is essential if anything approaching a true colour rendering is to be achieved.

Obviously, daylight must again be ruled out as its use would involve two extremely troublesome 'variables', viz. intensity and colour temperature, either of which is liable to change rapidly and independently of the other.

Fortunately these difficulties can be obviated by the use of 'photoflood' lamps in conjunction with a colour film suitably balanced for this type of illumination. All the data given in col. 6 are based on the use of one 275 watt, 220/230 volt Philips Photolita No. 1 (pearl) lamp with Kodachrome II A film.¹

When run at its rated voltage this lamp is, in fact, being overrun to about 800 watts, and like all tungsten light sources it emits an excess of red, its colour temperature being as low as 3400° Kelvin.² It must be emphasized, however, that this colour temperature will only be obtained (and maintained) if the lamp is run constantly at the correct voltage.

A variation of as little as one volt above or below this can cause a rise or fall (respectively) in the colour temperature of about 10° K. A difference of 50° K. (i.e. + or - 5 volts) is enough to cause false colour rendering.

Unfortunately the mains voltage is often below normal, sometimes as much as 20 volts on a 230 volt supply in cold weather, and even in summer a + or - fluctuation of 5 volts is common. Obviously, in such conditions, photoflood light will be no improvement on daylight unless a suitable variable transformer is used to control the voltage. Without one there is no alternative but to wait until the mains voltage reaches the required figure and hope that it will remain there long enough for the exposure to be made. The acquisition of a transformer cannot be too strongly recommended, for, quite apart from its use for exposure purposes, it also enables the voltage to be reduced while focusing, thereby lessening the heat and prolonging the life of the lamp.

With continued use the colour temperature of tungsten lamps tends to decrease, i.e. the light becomes redder. When this becomes apparent in the results, either the excess red must be corrected by fitting a suitable blue filter over the lens,³ or the lamp must be changed.

A simple method of checking the colour balance is to photograph an untoned, but not too shiny, silver coin and then view the resulting transparency against a sheet of white paper strongly illuminated by electric light. As silver is virtually 'colourless', traces of excess red or blue can fairly easily be detected.⁴ It follows that when photographing coins in colour for the first time it is useful and instructive to include a suitable silver piece as a check.

Lantern slides. Those who have the time, patience, and perseverance are advised to make their own black and white slides, because the average trade-produced slide is not always satisfactory. If the job must be sent to a photographic firm it is best to have only the printing stage done, and to mask and

¹ The Gevaert CTO4 filter mentioned in col. 6 is usually required to obtain exact colour balance.

² Average daylight is approximately 5400° K. to 6100° K.

³ A Gevaert CTB1 or CTB2 filter may be sufficient.

⁴ Naturally this test can only be relied upon if the correct exposure has been given.

bind them oneself. For slides of single coins ready-made square masks are easiest and best, provided the picture has been accurately centred, but if the picture occupies the whole frame it is usually better to do the masking with four strips of binding tape because the bought rectangular masks invariably cut off an appreciable part of the picture.

Colour transparencies should always be mounted between glass; the card mounts in which they are sometimes returned after processing are unsatisfactory for several reasons.¹ Double folding paper masks, suitably gummed, are obtainable,² into which the film is fixed by sticking it along one side only. When thoroughly dry the masked film is then bound up between two 5 × 5 cm. glasses in the usual way, care being taken not to enclose any dust or small hairs.

Newton's Rings. If colour transparencies are mounted between ordinary plain glass covers some of the slides will almost certainly develop Newton's Rings, which will show up rather conspicuously on projection.³ These 'rings', which tend to expand and contract like multicoloured amoebae, usually make their appearance near the centre of the picture, and can be very distracting. They are quite unpredictable; some slides never produce them; others have them before the slide is placed in the projector, or they may develop them only after the picture has been on the screen for several seconds and the slide has started to warm up. The formation of Newton's Rings can only occur where there is contact between the film and the glass, and it is the shiny (non-emulsion) side of the film which causes probably 95 per cent. of the trouble.

Fortunately, special, finely etched 'Newlo' cover glasses are now available which practically eliminate this nuisance. The routine use of one 'Newlo' glass with its etched side placed against the shiny side of the transparency will prevent 'ring' formation in the majority of slides. If, as occasionally happens, the emulsion side of the film also causes 'rings', then obviously a 'Newlo' glass must be used on both sides.

Projection of colour film. Although the dyes used for most colour films are remarkably stable, certain precautions are necessary if colour transparencies are to be preserved with their colours unimpaired. First, they should be stored in a cool, dry place, and never be exposed to sunlight. Secondly, the heat to which they are inevitably subjected during projection must be reduced to a minimum by every possible means. The projector should be efficiently fan-cooled, and, if possible, an extra heat-absorbing filter should be fitted. Naturally, the more expensive projectors are usually better designed as regards cooling, but even with these no attempt should be made to increase the light intensity by using a lamp of higher wattage than that recommended by the maker.

It is practically impossible to state how long a transparency can be projected without suffering some loss of colour. Obviously the longer a slide is

¹ Kodachrome film will be returned *uncut* if one corner of the address label is cut off before posting.

² ROWI double folding masks no. 5054 (24 × 24 mm.) and no. 5055 (24 × 36 mm.).

³ This applies also to black-and-white Dia-direct reverse film.

projected the warmer it will become, and the more likely it is to buckle, and this must be borne in mind when valuable or irreplaceable slides are being shown. The writer has colour slides of coins taken over 20 years ago which have hardly deteriorated at all, and he attributes this (rightly or wrongly) to the fact that they have never been projected for longer than 20 seconds at a time. However, with a modern, adequately cooled projector, colour film could, doubtless, be projected safely for much longer than this and there is therefore no real obstacle to the more extensive use of colour slides to illustrate numismatic lectures.

In conclusion, the writer sincerely hopes that some of those numismatists who have been deterred hitherto from attempting coin photography may be persuaded to try it, in the knowledge that if the directions given are carefully followed, reasonably good results should be obtained with the first film.

MISCELLANEA

COINS AT NOSTELL PRIORY, YORKSHIRE

LORD St. Oswald at Nostell Priory in Yorkshire is the fortunate possessor of a remarkably fine coin-cabinet made by Chippendale for which there still exists the original bill. The cabinet contains a miscellaneous collection of coins such as a country gentleman of the eighteenth century would have got together, and, as might be expected, there are one or two pieces in the Anglo-Saxon series which are of outstanding interest. Here it is proposed to put on record an eighth-century penny of cardinal importance for the chronology of Offa's coinage, and a little group of early tenth-century coins from York which are of the finest preservation and which seem clearly to derive from a hoard.

The penny of Iænberht, Archbishop of Canterbury from 765 until 792, is similar to one in the British Museum (*ex* Lockett 2632) which at the time that *Anglo-Saxon Coins* was published in 1961 was the only recorded specimen. The Nostell coin (Pl. XXIII, 13) proves to be from different dies. The die-axis is 90° and the weight 16.1 grains. It is thus 2.7 grains lighter than the British Museum coin, but the condition is less good. The two coins corroborate each other, and their significance for the student of Offa's coinage is that the side with the archbishop's name has the legend disposed in three lines. The 'three-line' type is a feature of Offa's last coinage, and the occurrence on rare coins of a prelate who died in August 792 must suggest that Offa's last coinage was beginning to be put in issue some four years before the end of his reign. It should be added that the authenticity of the Nostell specimen is self-evident, a matter of some importance because the cabinet does contain the usual proportion of early forgeries, notably a penny of Ceolwulf I (821-3) weighing 24.1 grains which is a cast of one in the British Museum (*B.M.C.* 108) as well as fabrications of coins of Coenwulf (796-821) and of Archbishop Ceolnoth (833-70).

The tenth-century York pennies belong to the so-called 'St. Peter' coinages of which the date has long been the subject of quite unnecessary controversy. As demonstrated in the 1957 *Numismatic Chronicle*, the hoard-evidence is decisive that all the 'St. Peter' coins belong to the first quarter of the tenth century, and it is also clear that the coins with a sword added to the type are later than those without. The Nostell coins belong to both groupings. Three (Pl. XXIII, 14-16) are 'early' and weigh respectively 20.4, 13.1, and 17.6 grains, the last being very slightly chipped. Two (Pl. XXIII, 17 and 18) are 'late', and weigh respectively 17.8 and 19.5 grains. In view of the fact that at a later date irregularity of die-axis was to be quite a feature of York coinage it is perhaps worth recording that only in the case of the first of the 'early' coins is the die-relationship other than regular, and in the case of this coin the divergency (350°) from the norm is so slight as to be explicable by the play of two square-headed dies in a loose collar. The second of the 'early' coins and both the 'late' ones have a vertical die-axis (0°), while that of the third 'early' coin is inverted (180°). Attention should also be drawn to the fact that the two 'late' coins exhibit the two principal varieties of Thor's hammer—the so-called 'pall' of earlier descriptions—with the shaft rendered in the one case by a single line and in the other by two.

As argued in the 1957 *Numismatic Chronicle*, it is most unusual for a hoard to contain both the 'early' (Danish) and 'late' (Hiberno-Norse) varieties of the 'St. Peter' coinage, and in any case recorded hoards of either variety are not all that common where the soil of England is concerned. There is, however, one Yorkshire

hoard, the 1807 find from between Bossall and Flaxton, which is on record as containing both 'early' and 'late' coins in considerable quantity (*Inventory* 162 and see *British Numismatic Journal*, xxviii. i (1955), pp. 11-17), which was very largely dispersed, and which came to light at a date sufficiently early for a parcel to have found its way to the Nostell cabinet. Although, then, certainty is impossible, the presumption must be that the Bossall/Flaxton hoard is the provenance of the five 'St. Peter' coins in such fine condition.

In conclusion we would wish to express our indebtedness to Lord St. Oswald who has been good enough to bring the coins to London for our inspection, and to give us permission to record these very interesting pieces in the pages of the *British Numismatic Journal*.

C. E. BLUNT

R. H. M. DOLLEY

AN OBTVERSE DIE-LINK OF CANUTE BETWEEN NORWICH AND THETFORD

IN his important paper 'The Relevance of Obverse Die-links to some Problems of the later Anglo-Saxon Coinage'¹ R. H. M. Dolley has for the first time given a comprehensive treatment of the different kinds of obverse die-links that exist. He discusses obverse die-links between coins of one moneyer struck at the same mint, between coins of different moneyers working at the same mint, between coins of the same moneyer struck in two different mints, and between those of different moneyers in different mints.

The last two kinds of die-link especially have played an important role in solving problems of attribution and locating unknown mint-sites. When Dolley wrote his paper (1956) only one case of the same obverse die having been used in different mints by different moneyers was known to him, but in the Appendix (written 1958) as many as six other instances were recorded, most of them still unpublished. As Dolley points out, 'normally such die-links can be found only by the systematic collation of all the coins of adjacent mints, and until now it cannot be claimed that so formidable a task has been undertaken even in the case of controversial problems of attribution . . .'. The discovery of those instances that are known today was due to a striking similarity of style that was noted between coins of different mints (usually of a style that occurred only at a few mints or of a slightly anomalous style) or to the finding of an unusual irregularity in an obverse legend. In the last case a quick check through the coded recordings of obverse legends in Hildebrand's *Anglosachsiska Mynt* resulted in several cases in the finding of the same irregularity on another coin which on close examination proved to be from the same obverse die.

The latest instance of such a die-link was found during the present author's recent stay in Stockholm where a Quatrefoil coin of Canute of the Norwich mint² was noted to read on the obverse:

+CNVT REX ANLOXX

which is in Hildebrand's code 'a ir. 203'. The reverse legend reads:

+DV/RFE/RDM/NOR

weight 1.24 gm.; die-axis 270°.

¹ In: *Commentationes de Nummis Saeculorum IX-XI in Suecia Repertis*, Stockholm, 1961.

² SHM Inv. 16009 (a hoard from Fardume on Gotland).

Hild. 2993 has the same reverse reading (misread as $\Theta V R F E R \Theta$), and also with the obverse legend Hildebrand made one of his rare mistakes. It is not 'a 10', but 'a ir. 203' and the coin in the Systematic Collection is in fact a die-duplicate of the hoard coin (weight 1.20 gm., die-axis 270°).



Hild. 2993.

Hild. 3525.

The only other obverse die in *Anglosachsiska Mynt* with the same irregularity in the legend is that of a Thetford coin (Hild. 3525) and, as the enlarged photographs¹ will show, the dies are identical. The reverse legend of this coin is as follows:

SV/MRL/DMO/ Θ EO

weight 1.30 gm., die-axis 270° .

The moneyer Thurferth strikes at Norwich as well as at Thetford in both the Quatrefoil² and the Pointed Helmet types of Canute (his name is spelled $\Theta V R E F E R \Theta$,

¹ The photographs and indication of the weights have been kindly supplied by the authorities of the Royal Coin Cabinet in Stockholm.

² At Thetford he is only recorded for the Pointed Helmet type by Hildebrand, but in the Berlin collection I noted a coin of Quatrefoil type reading $D V F R T \text{ ON } \Theta E O$.

ÐVRFDR, ÐVRFERÐ, ÐVRFERD, DVFRÐ, DVFRT). At Norwich he is known in the Quatrefoil type for nine different obverses with four different styles, and nine different reverse dies, in the Pointed Helmet type for one obverse and one reverse die. At Thetford he is known to have used one obverse and one reverse in the Quatrefoil type, and two dies each for obverse and reverse in the Pointed Helmet type. He may therefore have started to strike in Quatrefoil at Thetford, moved to Norwich bringing with him an obverse die which had also been used by the workmen of Sumerleth at Thetford (cf. Hild. 3525), and continued to strike in Quatrefoil and Pointed Helmet at Norwich, afterwards returning to Thetford and striking some more Pointed Helmet coins there. Alternatively he may have started at Norwich, moved to Thetford, bringing an obverse die with him (cf. Hild. 2993), which was then shared by Sumerleth, and returned to Norwich. As Dolley has shown,¹ obverse dies were quite often shared by moneyers working at the same mint.

Another possibility is that Sumerleth (spelled SVMERLDA, SVMERLEÐ,² SVMRLD, and SVMRLEÐ), who is known only in the Quatrefoil type at both Norwich and Thetford, started to strike at Thetford (with four different obverses showing two different styles and four different reverses)³ and moved to Norwich, bringing with him the obverse die of Hild. 3525 which was then shared by Thurferth, or vice versa, started at Norwich and moved to Thetford. It is impossible to see whether the die was newer when it was used to strike the Thetford coin or when it was used at Norwich.

In the Appendix to his paper⁴ Dolley refers to 'impossible' die-links, namely die-links between mints that are geographically far apart. In all those cases which have been found so far it has been possible to show that the dies had been manufactured outside England. There are also instances of obverse die-links between mints in the same area where the dies proved to be Scandinavian or Irish. In the case of the Norwich-Thetford die-link, however, both the style and the lettering are perfectly normal, and there is no reason to suspect a non-English origin. The discovery of this die-link does not bring us any nearer to the solution of any of the problems connected with the organization of the mints in late Anglo-Saxon times, but it is hoped that it may one day be used as a building stone in a more ambitious structure.

GAY VAN DER MEER

'EDWARDVS REX AN'—A FURTHER POSTSCRIPT

IN my paper in the preceding volume of the *Journal*⁵ I gave my reasons for saying that recognition of the two die-links mentioned on page 328 is the key to solution of the problem of de Bury or Hatfield and that a *terminus post quem* for the whole of the Florin type coinage of Durham is the Sede Vacante of April-June 1345.

In the postscript on page 333 reference is made to Mr. Fred Baldwin's 'new' coin⁶ (No. 5A on the plate) which has, I submit, virtually clinched the matter.

¹ Op. cit., pp. 160-2.

² Hild. 3523 gives SVMERLEÐI, but the I at the end is ligulated with the arm of the long cross dividing the legend, so that the reverse legend should be read SVMERLEÐ MO ÐEO.

³ It has not been possible to compare the dies of the three coins of Sumerleth now in the British Museum (recorded by Carson in *N.C.* 1949, p. 218) with those in Stockholm, but it seems probable that they were struck from the same dies as Hild. 3526 and 3523.

⁴ Op. cit., pp. 171, 172.

⁵ *B.N.J.* xxix, 1959, pp. 326-33 and Plate XXVII. For convenience referred to here as 'my 1959 paper'.

⁶ It is 'new' in that it would seem to have been unknown both to Fox and Lawrence. It is an

However, to recapitulate, the background is that all the episcopal coins of the type either belong to the EDWAR Group or else to the very rare EDWARDVS REX AIN coinage and the evidence for giving them all a date *after* de Bury's death in 1345 may be restated as follows:

- (a) An EDWAR Group obverse die is muled with a Sede Vacante (1345) die (*B.N.J.*, xxix, pl. XXVII, no. 3).
- (b) Another EDWAR Group obverse die is muled with a reverse die which is used with an EDWARDVS REX AIN obverse die (*ibid.*, no. 5a).
- (c) That same obverse die is muled with a reverse die of the 1351 coinage (*ibid.*, no. 10).

From this it is clear that these three coins¹ plus no. 2 on the plate (which is the 'true' coin of the Sede Vacante reverse die of no. 3) are key coins from the point of view of the dating of the series.

Until recently no. 2 on the plate (in the British Museum *ex* the Derby Find of 1927) was considered to be unique or, at any rate, no other specimen was known either to Fox or to Lawrence both of whom publish the coin in consecutive articles in the same volume of *Num. Chron.*² but with differing versions of the obverse reading. Lawrence records it as being +EDWTR R ANGL DMS YB and Fox as being +EDW RANGL DMS YB.³ That the former reading is correct is confirmed by a second specimen of the coin which has recently come to light and which is illustrated here (Pl. XXIII, 22).

In my 1959 paper I gave the reading as being the Fox version (although I should certainly have checked its accuracy for myself) and it is the purpose of this note to draw attention to this mistake.

The 'new' specimen is from the same obverse die as the Derby find coin but is from a different (although similar) reverse die on which only —I/TKS/DVN/O— is legible.

It is unfortunate that the two final letters are not visible but all the odds must be in favour of their being the UN of the 'Derby' coin and of this die also being devoid of episcopal marks. That being so it becomes a second Sede Vacante reverse die with the DVNOLM spelling and is in fact the earliest instance of it. Hitherto and throughout the 'Edwardian' coinage down to this point, first DVREME and subsequently (in Fox type XI) DVNELM have always been the basic forms.

It is fortunate that the 'new' coin does show that part of the obverse reading which is very indistinct on the 'Derby' specimen with the result that the two coins combined give the full reading exactly as Lawrence recorded it. This was no mean feat considering that the coin was 'new' to Lawrence⁴ and that much of the obverse is so weakly struck that Fox's version of the reading may well have been intended as a correction of Lawrence's.

It is now definite that the coin belongs to the EDWAR Group (the ANGL for ANG and YB for hYB simply being variants of the usual reading on this one die—in all probability the earliest of the group) so that there are, for all practical

exceptionally fine example of an EDWAR Group coin but it is not a new variety. It is only the die combination which is new but it is this particular combination which gives the coin its special significance.

¹ The one in Mr. Fred Baldwin's collection and the other two in Mr. Blunt's.

² *N.C.*, 1928, pp. 16–46 (Fox—The pennies and halfpennies of 1344–51) and 47–60 (Lawrence—A hoard of English and Foreign Sterlings found at Derby).

³ Lawrence. *N.C.*, 1928, p. 49 (also p. 58); Fox, *ibid.*, p. 33 (also p. 44).

⁴ *N.C.*, 1928, p. 49 where Lawrence describes the coin as a new variety and remarks upon the unusual features of the obverse legend.

purposes, only three obverse readings and not four as listed on p. 331 of my 1959 paper. Reading 'B' is non-existent and should be deleted.

Also it is now apparent that this particular die (and its use with a second reverse die is a significant factor) is a transition between the earlier (the normal Fox class 4) Sede Vacante coinage and the EDWAR Group episcopal coinages which follow it.

In my 1959 paper I do not think I have done sufficient justice to the 'Derby' coin as a key coin in the arrangement of this very complex series and although I may have dwelt on the subject quite long enough I should like to conclude this note by listing the details of its transitional features. These are:

- (i) The letter 'N' on all other EDWAR Group coins (all of which are episcopally 'marked') is Lombardic in every instance. The second 'N' on this one die is the reversely barred Roman letter which, in combination with the normal Roman letter, occurs on all other Sede Vacante coins.
- (ii) These latter all read DVNΘΛM (or more rarely DVNΘΛM). The 'Derby' coin and its new counterpart are the only instances of the DVNΘΛM reading—a reading which is continued on the 'pellet in centre' marked EDWAR Group coins which come next in the series.
- (iii) These same two are the only Sede Vacante coins to have Lombardic letters for both the 'M' and the 'N' on the reverse, a feature which occurs on all other EDWAR Group coins. Hitherto only the 'N' (or the first one where the reading is DVNΘΛM) has been Lombardic.

One could scarcely hope to find better evidence of a transitional stage from one group of coins to another than is apparent here.

F. ELMORE JONES

A LATE NOBLE OF HENRY V RECENTLY FOUND IN YORKSHIRE

THE purpose of this note is to put on record a very rare noble of Henry V which was submitted recently to the British Museum (Pl. XXIII, 21). The coin was found in October 1961 by a workman who was servicing a water main at a cross-roads near Barmby-on-the-Moor some ten miles east of York. An inquest has since been held, but established that the coin was not treasure trove. As will be seen from the illustration the coin is in an unusually fine state of preservation, and it weighs 107.2 gr. The dies are notably different from those of the British Museum specimen, but there is no doubt that it should be classified as a Brooke (*N.C.*, 1930, pp. 44–87) Class VIIIb/IX mule. Accordingly it must belong very late in the reign, while its condition would suggest that it was lost not very long after it left the London mint.

R. H. M. DOLLEY

COINS STOLEN FROM SPINK & SON LTD.

As a result of a robbery at the premises of Messrs. Spink & Son Ltd. in January 1962 a number of important coins were stolen, and it is desirable that a record of some of these be made in case they should happen to appear at some time in the future.

A list of some important English gold coins is given below, together with details of a group of twenty-nine silver coins of the York mint of the reign of Charles I. Photographs of the gold coins appear on Plates XXIV to XXVII.

GOLD COINS

1. Henry VII, sovereign. M.m. Dragon on both sides. Brooke Groupe III. (Ex Dr. E. Carter collection.)
2. Henry VIII, sovereign of the base coinage of 1544/7. M.m. Lis on both sides. Whitton dies A/a. (Ex Cuff, Hastings, Moon, Roth & Ryan collections.)
3. Edward VI, sovereign of 20 shillings, third period 1550/3. M.m. Tun. (Ex Dr. E. Carter collection.)
4. Edward VI, half-sovereign. Second period, 1549/50. Uncrowned bust. M.m. Arrow.
5. Edward VI, half-sovereign. Second period, 1549/50. Crowned bust. M.m. Swan.
6. Mary Tudor, sovereign of 1554. (Ex Lockett, lot 1924.)
7. Elizabeth I, fine sovereign of 1584/6. M.m. Escallop. (Ex Schulman sale, Amsterdam, 18/19 January 1954, lot 870.)
8. Elizabeth I, pound sovereign of 1594/6. M.m. Woolpack.
9. Elizabeth I, ryal of 1584/6. M.m. Escallop. (Ex Huth, Ryan and J. A. M. Patrick collections.)
10. Elizabeth I, mill half-sovereign. Mestrelle's coinage of 1568/70. M.m. Lis. Last type, small flan, grained edge. (Ex Hilton-Price, lot 149.)
11. James I, rose ryal. Third coinage. M.m. Spur Rowel (1619) on both sides.
12. James I, unite. Second coinage. M.m. Crescent (1617/18). (Ex Dr. E. Carter collection.)
13. James I, laurel. Third coinage. M.m. Trefoil (1624/5).
14. Charles I, unite. Group D, Class 11a+11b. M.m. Anchor (1638/9). (Ex Dr. E. Carter collection.)
15. Charles I, mill unite. Briot's coinage of 1631/2. M.m. Anemone+B. Schneider, Variety 1. (Ex Montagu and Dr. E. Carter collections.)
16. Charles I, Oxford triple unite of 1643. Beresford-Jones, dies VI/L5. (Ex Ryan & J. A. M. Patrick collections.)
17. Cromwell. Pattern broad of 1656 by Thomas Simon.
18. Charles II, unite of the hammered coinage of 1660/2. M.m. Crown. First issue without numerals. (Ex Dr. E. Carter & K. Redhead collections.)
19. Charles II, five guineas, 1668. 1668/73 variety with thinner hair at the neck.
20. James II, five guineas, 1687.
21. William and Mary, five guineas, 1694.
22. William III, five guineas, 1701. Second variety, 'Fine work' type. Normal sceptres.
23. Anne, five guineas, 1711. Second bust, broad shields, large letters.
24. George I, two guineas, 1720. Lombardic J for figure 1 in 1720.
25. George II, two guineas, 1738. Young Head type.
26. George II, two guineas, 1739. Intermediate Head type.
27. George II, two guineas, 1748. Old Head type with large letters on both sides.
28. George III, half-guinea 1787. Fifth bust by Pingo, spade reverse.
29. George III, guinea 1813. Sixth bust, 'military' type.
30. George III, seven shilling piece, 1802. Pingo bust with short tie on obverse. Date below crown on reverse.
31. George III, quarter-guinea, 1762. Bust by Yeo.

32. George III, sovereign, 1818. Bust by Pistrucci.

33. George III, half-sovereign, 1817. Bust by Pistrucci.

CHARLES I SILVER COINS

YORK MINT

The classification used is that given in HAWKINS—*English Silver Coins*, 1887

Half-crowns

1. Type 2. Struck on a square flan: wt. 292 gr. EF and probably unique. (Ex Howard, Street, Marsham, Montagu, Webb, Lockett, lot 2363 (ill.).)
2. Type 1. (Ex Dimsdale, Durrant, Brice, Montagu, Webb, Lockett, lot 2364 (ill.).)
3. Type 1*a*. (Ex Murchison, Neck, Webb, Murdoch, Hamilton-Smith, Lockett, lot 2365 (ill.).)
4. Type 2. (Ex Huth, Rashleigh (1953), lot 235 (ill.).)
5. Type 3. VF. (Ex S. R. Naish.)
6. Type 3 var. (Ex Webb, Murdoch, Lockett, lot 4180 (ill.).)
7. Type 4. (Ex Cumberland-Clarke, Morrieson, Ryan.)
8. Type 5. (Ex Montagu, Webb.)
9. Type 6. Small flan, unusually high relief. Uncrowned head. (Ex Farquhar (1955), lot 134 (ill.).)
10. Type 6.
11. Type 6. Base silver.
12. Type 6. EF. (Ex A. J. West.)
13. Type 7.
14. Type 7 var. B to right of crown. (Ex Lockett, lot 2372 (ill.).)
15. Type 7*a*. Reads HIBA. (Ex Rashleigh (1909), Hamilton-Smith, Lockett, lot 2373 (ill.).)
16. Type 7 var. Reads BRT; EBOR has been carefully erased. (Ex C. A. Oliver.)

Shillings

1. Type 1. Very fine.
2. Type 1.
3. Type 2. EF (Ex S. R. Naish.)
4. Type 2. VF/EF (Ex A. J. West.)
5. Type 2 var. (Ex Lockett, lot 2375 (ill.).)
6. Type 3. VF (Ex S. R. Naish.)
7. Type 4.
8. Type 4. EF (Ex A. J. West.)
9. Type 4. (Ex Lockett, lot 2377 (ill.).)
10. Type 5. VF/EF (Ex A. J. West.)
11. Type 5.

Sixpences

1. Without C and R on reverse. (Ex Lockett, lot 2379 (ill.).)
2. Type 2. FDC/RR. Exceptionally fine. (Ex A. J. West.)



9



11



12



13



16



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15



17



18







1



2



3



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4



6



7



8



10





SOME HOARD EVIDENCE FROM A NINETEENTH CENTURY COLLECTION



COINS AT NOSTELL PRIORY



MISCELLANEA



28



29



32



33



31



30



COINS STOLEN FROM SPINK & SON LTD. (4)





19



20



21



22



23



24



25



26



27



TRURO MINT

1. Half-crown, undated. Lockett L-12. (Ex Montagu, Morrieson, Lockett, lot 4577 (ill.).)

WEYMOUTH MINT

1. Half-crown. Allen B-11. (Ex Lockett, lot 4581 (ill.).)
2. Half-crown. Allen K-55. (Ex Walters (1932) and Lockett, lot 4587 (ill.).)

PS. As this goes to press (September 1962) some of the coins have been recovered. Among them are, of the York mint Half-crowns No. 1 ex Lockett 2363 and No. 9 ex Farquhar 134, of the Weymouth mint Half-crown No. 2 ex Lockett 4587.

COINS STOLEN FROM B. A. SEABY LTD.

A BURGLARY at B. A. Seaby Ltd. in February 1962 resulted in the loss of a large number of English gold coins from the reign of Edward III onwards, which it is to be feared may have been melted down for their bullion value. Although a number were rare, none, fortunately, was of outstanding importance. The same regrettably cannot be said of the silver coins lost on this occasion. Among these was the only known specimen of the London penny of Richard III. This coin has the boar's head initial-mark on the obverse and is illustrated in the Rashleigh (1909, lot 753) and Grantley (1944, lot 1466) sale catalogues. Another great rarity was an open-crown penny of Henry VII of London with the initial mark Lis-on-half-rose. This reads HENRIC DEI GRA REX AG (*sic*) and weighs 12.3 gr. Its pedigree is not certainly known, but it is believed to be the specimen illustrated in the Wheeler (1930) sale catalogue as lot 294.

REVIEWS

Sylloge of Coins of the British Isles. Hunterian and Coats Collections, University of Glasgow. Part I. Anglo-Saxon Coins. By ANNE S. ROBERTSON. London. Published for the British Academy 1961. xviii+88, 42 plates.

THIS volume brings into a single series the Anglo-Saxon portion of two collections. The famous Hunterian Cabinet is represented here by 888 pieces, of which 783 have a recorded history going back to William Hunter's own time. The second collection, represented by 350 pieces, was formed by Mr. Thomas Coats of Ferguslie, mainly between 1871 and 1882. In accordance with the wishes of Mr. Coats's family, it is preserved as a separate collection, of which the serial numbers are given in this volume, but the remarkable way in which it supplements the Hunterian coins fully justifies its incorporation with the Hunterian series in a single edition. It will always be overshadowed by its great Hunterian neighbour, but it includes a number of important rarities, and it provides valuable material, even for the periods with which the name of William Hunter is especially associated. Of the five coins of Berhtwulf of Mercia described in this volume (355-9), four are in the Coats collection.

The volume is appropriately dedicated to the memory of Mr. R. C. Lockett, the greatest collector of this generation. The coins are described with meticulous care by Miss A. S. Robertson, Curator of the Hunter Coin Cabinet in Glasgow University. The casts and, where necessary, the direct photographs of the coins are the work of Mr. Hugh Forbes, University Technician in the Hunterian Museum. A brilliant set of 42 plates by the Cotswold Press provides what amounts to a conspectus of the whole development of the Anglo-Saxon currency from the eighth to the eleventh century. Miss Robertson tells the history of the Hunterian collection, largely from documents in the museum, and explains the way in which knowledge of its contents was transmitted to later numismatists through Hunter's executor Charles Combe and his son, the great Taylor Combe of the British Museum. It is interesting to know that the publication of the Hunterian collection was desired, and even planned, by William Hunter himself.

Now and then the transliteration of names might be criticized as almost too precise, OFFŪ (309), IBBŪ (313), BEAXNEARÐ (326), and CFNEÐRFÐ (329) come as closely as print will allow to the actual letter-forms on the coins. But they give an impression of inaccuracy to the inscriptions on which they occur. It is really unjustified, for the epigraphy of the eighth-century currency has not yet been studied in sufficient detail to show in all cases whether a particular aberrant form represents the idiosyncrasy of an artist or metal-worker, a survival from the runic alphabet, or a craftsman's failure to hold a graving-tool at a correct angle. Moreover, the ingenuity with which the names of moneyers are often arranged across the reverse field of ninth-century coins defeats reproduction in modern type. Miss Robertson wisely abandons the attempt to reproduce the perverse acrostics in which the names of moneyers are set out on many coins of Æthelwulf and on nearly all coins of Æthelberht (548-55), though she copies the arrangement of the lunette-divided inscriptions of this period, printing, for example MON+MAN+ETA from a penny of Æthelred I of Wessex (559) and DMON VVLFEAR ETA from a penny of Burgred of Mercia (380). The problem of reproducing pre-Conquest inscriptions in modern capitals is really insoluble, nor, with the plates at hand for reference, does it seriously complicate the study of the coins. The important point is that neither these peculiarities of lettering and arrangement nor the downright mistakes which occur in all periods affect the authority of the Anglo-Saxon coinage as

a principal source of information about Old English personal names and sound-changes. One of the conclusions brought out most clearly by this, as by the Fitzwilliam Sylloge is the obvious intention of every settled government in all periods that the name of the responsible moneyer should appear on every coin in a form which would enable him to be identified.

The space which Miss Robertson has given to the transliteration of obverse legends means that the plates and the description of the coins rarely face each other with exact precision. This is sometimes inconvenient. But it is a minor inconvenience, for which there is ample compensation in the amount of detail which is given about the representation of the royal styles. One of the remarkable features of the late Old English currency is the contrast between the care of the die-cutters when dealing with the names of moneyers and their casual treatment of the sovereign's name. The sequence of styles in the reformed coinage of 973, in which the hyper-correct *ÆDELRAED* frequently appears at the end of Æthelred's reign, breaks down into a curious variety of careless spellings in the early types of Edward the Confessor. On no. 988, for example, put out by Ælfhere of York, the king's name is firmly written *ED:PINE*. The question must arise, however, whether, in this case, so deliberate a substitution of another personal name for that of the reigning king does not result from an alteration by a forger. A coin of the same type, no. 1014, has, as Miss Robertson points out, been altered from the common mint of York to the rarer mint of Dover by the simple change of one letter: *EOFR* to *DOFR*. In the case of no. 988 the possibility is increased by two considerations: in the Reading University collection is a coin from the same dies on which the king's name clearly reads *+ED:/DRE+A*; this and the Hunter coin are illustrated here for comparison (Pl. XXIII, 19 and 20). Secondly, there was in Thoresby's collection a 'famous unic' of similar type and mint and with the alleged reading *EDPIN*, which had generally been regarded as a coin of Edwin, king of Northumbria, 616-32, until Samuel Pegge in his *Assemblage*, pub. 1772, correctly attributed it to Edward the Confessor. An ingenious forger, such as John White, might well have thought it worth while to produce another 'Edwin' by altering an Edward. It is very helpful to have Miss Robertson's readings of these anomalous obverse inscriptions, for not even the best of plates will answer to the varieties of light and shade which are sometimes necessary to bring out the exact lettering of a badly worn coin.

The Hunterian collection has long been famous for the great rarities which it contains. Familiar as isolated pieces, they are still more impressive when, as here, they can be seen in their proper place in a long series. The single coin of Ceolwulf II of Mercia (381) looks fragile and is of light weight, but in craftsmanship it obviously belongs to another class than the twenty pennies of Burgred that come immediately before it. To many numismatists the chief interest of the collection will lie in outstanding pieces like this, and more generally in the coins which show the designer free to indulge his faculty of invention without the necessity of conforming closely to a prescribed succession of types. But to others, the present volume will be of primary importance for the astonishing amount of material which it provides for the managed currency of the period from *circa* 973 to 1066. It includes 71 examples of the first type of the reformed coinage instituted by Edgar. Most of them are in a brilliant state of preservation, and show at a glance both the die-cutters' general skill in execution and their tendency to lapse from time to time into barbarism. There are 41 examples of the 'First Hand' type of Æthelred II, though, curiously enough, only 2 examples showing the hand in benediction. After this, although every type in common circulation is well represented—it is noteworthy that Hunter seems never to have acquired an Agnus Dei penny of Æthelred—the next remarkable concentration of examples occurs in the 'sovereign-martlets' type of the

Confessor, of which there are 30 specimens. Here, the fine condition of most of the coins is particularly valuable, for it brings out the competence with which an Anglo-Saxon craftsman at his best could translate an elaborate miniature design into metal-work (e.g. 1100, 1110, 1112). The volume ends with 50 fine coins of Harold II, culminating in three Bristol pennies (1226, 1227, 1228) which show the king's head in almost medallion relief. The exceptional relief probably accounts for the flaw in the die which disfigures each of these pieces. It is sad to note that one of them (1228) has been mutilated by an owner who has wantonly altered the original *BRVCE* of the reverse inscription into *BVCIN*—presumably in order to give the coin the rarity of a coin from Buckingham. The crudity of his lettering would disgrace any professional forger.

The collections described in this volume are published at an opportune moment. The history of the Old English coinage is coming to greater precision each year through intensive work on details once thought of little account. The rate of progress in this work must largely depend on the extent to which coins in different collections can be brought into easy comparison with one another. The periods of greatest intrinsic interest, such, preeminently, as the reign of Offa, are already covered by a good photographic record. More illustration is urgently needed for the phases of the coinage which produced few pieces of outstanding merit or historical interest. From one of these phases, the present volume illustrates more than a hundred of the conventional representations of symbolized authority which preceded the mid-eleventh-century experiments in portraiture. More generally, it makes one of the largest collections in Britain immediately available everywhere for these studies. And as a massive demonstration of the process by which the Anglo-Saxon state came to the best ordered currency in western Europe it deserves a place among the primary materials for English history.

FRANK M. STENTON

Anglo-Saxon Coins. Studies presented to F. M. Stenton on the occasion of his 80th Birthday, 17 May 1960. Edited by R. H. M. DOLLEY. London, Methuen, 1961.

THIS handsome volume has a twofold purpose. In the first place it is a tribute to Sir Frank Stenton on his eightieth birthday from a number of contributors of articles and a larger number of subscribers. It is Sir Frank's second such birthday present. *Sir Christopher Hatton's Book of Seals* marked his seventieth birthday, and nothing would rejoice his friends better than to be able to pay a like tribute on his ninetieth. Meanwhile they wish him many happy returns of the day.

His greatest achievement has been to rediscover and rewrite the history of Anglo-Saxon England. In the process he has shown the value of two sources of evidence which had largely been neglected by students and left in the hands of amateur antiquaries and collectors. With the late Sir Allen Mawer he put upon a serious footing in this country the study of place-names, and the work they started goes on in the volumes of the Place-name Society. What more concerns this review is that he has brought numismatists into partnership, and taught them that coins are documents of great historical value. As Mr. Dolley says in the preface to this book:

The last decade has witnessed the emergence of a new school of Anglo-Saxon numismatists, and only those who have borne the heat of the day can appreciate to the full what Sir Frank's discerning encouragement has meant to a younger generation struggling to create academic standards in a discipline too long the preserve of the mere collector.

His encouragement and leadership have culminated in the work of the Sylloge Committee of the British Academy, which has already produced two volumes and will, it is hoped, produce many more.

For frontispiece there is a delightful photograph by Simon Blunt which preserves for present and future generations a vivid impression of a keen and kindly scholar gazing, as it were, across the centuries to the dim past, and weighing the works and divining the thoughts of our Anglo-Saxon forebears.

The volume is admirably edited by Mr. Dolley, and he and Mr. Christopher Blunt are the principal contributors. Mr. Blunt studies the coinage of Offa, dealing with the transition from *sceatta* to penny, and examining and dating the different groups of coins and the hoard evidence. Mr. Dolley and Mr. Blunt attempt a chronology for the coins of Alfred the Great, and Mr. Dolley and Mr. Skaare for those of Æthelwulf of Wessex. Mr. Dolley and Dr. Metcalf together study the reform of the coinage under Edgar. These valuable contributions contain the core of the book, offering a framework of dates within which much other work can be fitted.

Mr. J. P. C. Kent discusses the influence of casual discoveries of late Roman coins upon Anglo-Saxon types, and concludes that nothing of Roman date remained in circulation at the time of the Anglo-Saxon settlements. Mr. P. D. Whitting finds little evidence of Byzantine influence. Mr. C. S. S. Lyon and Mr. B. H. I. H. Stewart have narrowed the field within which solutions may be found of the problems raised by the Northumbrian Viking coins in the Cuerdale hoard. Mr. Dolley and Mr. F. Elmore Jones suggest that the 'Martlets' in the 'Arms of St. Edward' are really eagles; and Mr. Dolley and Miss J. Ingold write on Viking Age coin hoards from Ireland.

Another group of contributors includes Miss G. van der Meer on corrections to and comments on Hildebrand's famous catalogue of the Anglo-Saxon coins in the Swedish Royal Coin Cabinet; Miss V. J. Butler on the results of a systematic weighing of the coins of Æthelred II and Cnut; and Mrs. J. S. Martin on eighteenth century numismatic manuscripts and numismatists. Professor Whitelock has a most interesting short paper on the numismatic interest of an Old English version of the legend of the Seven Sleepers.

Mr. Grierson provides a wider historical setting by discussing the meaning of 'sterling', and Mr. H. R. Loyn reviews the relationship of borough and mint in the later Anglo-Saxon times.

Sixteen magnificent plates, and indexes of persons, modern authorities, places and things complete this work of piety and learning. This mere catalogue of its contents is sufficient to show its range and value to Anglo-Saxon numismatics.

J. W. F. HILL

British Copper Coins and their values—Part II Tokens. Edited by H. A. SEABY. Seaby's Numismatic Publications, London. 1961. 12s. 6d.

THIS catalogue has been produced on exactly the same lines as the recently published '*Part I Regal Coins*'; in fact the two parts are obtainable cloth bound in one volume, the page numbering of part II being continuous with that of part I.

Part II, which deals with the tokens is inevitably divided into three main sections, viz. tokens of the seventeenth, eighteenth, and nineteenth centuries, each section being prefaced by a short but informative historical introduction. All the entries are numbered according to the standard works—Williamson, Dalton and Hamer, and Davis, respectively.

Considering the enormous number of seventeenth- and eighteenth-century tokens recorded in these works, the task of making a suitable selection for inclusion in this catalogue was, obviously, not an easy one. Every effort seems to have been made to list all the genuine eighteenth-century trade tokens for, although a large proportion of these are relatively common, they are, historically, by far the most important. On the other hand, all the tokens struck specially for sale to collectors, and most of the mules, and tokens with 'wrong' edge readings have been omitted.

Some idea of the number of eighteenth-century tokens listed can be obtained by taking three counties at random; thus there are 21 listed for Cambridgeshire from the 56 varieties recorded in Dalton and Hamer; for Hampshire there are 85 out of 200, and for Sussex 31 out of 64; an average of about 43 per cent., which is more than a first glance at the book would suggest.

The first two sections are illustrated from line blocks, but for the nineteenth-century pieces excellent half-tones are used from photographs by Mr. F. Purvey, the superiority of which is at once apparent. However, as the number of tokens illustrated for each section averages, roughly, only one for each county, one wonders whether so few illustrations serve any really useful purpose, apart from making the catalogue more attractive.

C. W. P.

PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 1961

(For list of past Presidents and Medallists see page 201; for Officers and Council see page 203)

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 24 January, Mr. D. F. Allen, President, in the chair, there were elected, to Ordinary Membership, Dr. E. J. Harris and Mr. S. N. Lane, to Junior Membership Mr. I. A. Kish and Mr. D. Fearon. Dr. J. P. C. Kent read a paper on 'The Scarborough Hoard of Groats of Henry VIII and of Edward VI in Henry's name' and exhibited a selection of coins from the hoard by the courtesy of the Keeper of Coins, British Museum. The hoard was discovered on 2 June 1960 during demolition work in St. Thomas Street, Scarborough. The hoard, which was contained in a Siegburg jug, consisted of 224 pieces, of which the majority were base groats. It appears to have been deposited towards the end of 1550. Dr. Kent, having described the hoard in some detail, proceeded to draw a number of conclusions as to the order and dating of privy marks in use between 1548 and 1552.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 28 February, Mr. R. H. M. Dolley, Director, in the chair, there were elected, to Ordinary Membership Mr. M. P. Barnes and Dr. W. B. Parker, to Junior Membership Mr. N. G. Rhodes. Mr. R. C. Strong, Assistant Keeper at the National Portrait Gallery, read a profusely illustrated paper on 'The Medallion Portraiture of Queen Elizabeth I'.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 28 March, Mr. D. F. Allen, President, in the chair, there were elected, to Ordinary Membership Nottingham University Library, Mr. D. N. Allison, and Mr. N. J. Ebsworth, to Junior Membership Mr. P. J. Browning, Mr. T. J. Delbridge, and Mr. D. S. Freedman. In the absence of Miss V. J. Butler, a number of short papers were read. Dr. E. J. Harris spoke on varieties in the York 'Sovereign' pence of Henry VII. A paper by Mr. R. H. M. Dolley on the Coinage of Ethelwulf was read in his absence by Mr. C. S. S. Lyon. This commenced with a general review of hoards containing coins of Ethelwulf and proceeded to demonstrate the sequence of types in the two *officinae* in use during this reign. A paper by Dr. J. P. C. Kent on the Ryal of Henry VIII was read in his absence by Mr. P. Spufford.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 25 April, Mr. D. F. Allen, President, in the chair, Dr. J. A. Kay was elected to Ordinary Membership of the Society. Mr. R. H. M. Dolley read a paper entitled 'Some Obstinate Mules' in which he explained two categories of refractory mules and tentatively attributed a mint to Rhuddlan in the winter of 979/80. The category of obstinate mules were those in which genuine English dies of Æthelred were muled with Scandinavian imitations. These were explained in terms of the flight of the moneyer OSCETL from York to

Lund where he continued to strike with York dies. Mr. Dolley reconstructed the details of his flight and suggested that he took with him two obverse dies of the intermediate Small Cross issue and three reverse dies, one of ARNCETL of the intermediate Small Cross issue and one of his own and one of OBAN of the Crux issue. The second category of obstinate mules consisted of those in which the reverse dies were apparently earlier than the obverse dies. Mr. Dolley demonstrated how all but one of such pieces of the reign of Æthelred had a proven or suspected Scandinavian origin.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 23 May, Mr. D. F. Allen, President, in the chair, Mr. J. S. Forbes, Deputy Warden of the Assay Office at Goldsmiths' Hall, read a paper entitled 'The Fineness of the Early English Penny' in which he described a series of assays carried out by Mr. Dalladay and himself on a selection of English pennies ranging in date from 870 to 1300.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 27 June, Mr. D. F. Allen, President, in the chair, Mr. M. J. Day, Dr. J. F. McMillan, and Mr. J. B. Rutland were elected to Ordinary Membership of the Society. There were read three short papers. Mr. R. H. M. Dolley discussed very fully a strange coin in the forgery trays of the British Museum, purchased in 1836, concluding that the piece was neither a forgery of the tenth or nineteenth centuries nor a trial piece in pewter, but a genuine penny struck between 973 and 975, the silver of which had been entirely transformed into silver chloride, thus accounting for the strange colour and fabric and for the increase in weight from 22.5 to 29.4 gr. The moneyer was Edmund—EADMUND M O LVN—hitherto unknown for the reign of Edgar, although an Edmund is known as a London moneyer under Æthelred II. Dr. J. P. C. Kent spoke on the Lutton Treasure Trove, consisting of 183 pieces ranging from Philip and Mary to Charles I, found on 6 May 1961 adjacent to the manor house of Lutton, Northants., and now in the Peterborough Museum. Mr. B. H. I. H. Stewart spoke on 'The Survival of Edward Pennies'. Basing his analysis on the known figures of mint production and on the contents of the Montrave and Boyton hoards, Mr. Stewart drew a number of complex statistical conclusions and demonstrated that there appeared to be no very simple correlation between hoards and bullion minted.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 26 September, Mr. D. F. Allen, President, in the chair, Mr. P. F. Purvey read a paper on 'The York Coinage of Richard II'. After pointing out that 60 per cent. of London halfpence did not fit satisfactorily into Brooke's classification, Mr. Purvey developed a basis of classification of the York pence from a study of die-relationships and finally related this to the problem of the London halfpence, suggesting that the hitherto unclassified 60 per cent. were probably struck in the years 1389–91 and illustrating his hypothesis by diagrams of mint output.

At an Ordinary Meeting held at the Warburg Institute on Tuesday, 24 October, Mr. D. F. Allen, President, in the chair, Dr. R. J. Hudson, Mr. B. C. Pickard, and Mr. H. McMaster were elected to Ordinary Membership of the

Society. The President read a paper entitled 'Some New Coins of the Iceni' in which he analysed the contents of the twelve known hoards of Icenian coins and developed a scheme of classification, and tentatively also of dating, on the evidence of photographs of some nine hundred of the twelve to fifteen hundred known specimens. Mr. Allen suggested that the gold coins of the Iceni and the silver coins bearing a bear on the obverse (possibly a boar standard) and a horse on the reverse might commence in the last quarter of the first century B.C., whilst the inscribed silver coins probably came to an end in A.D. 47 although he also suggested that certain sub-Roman silver coins were issued by a semi-autonomous Icenian ruler between A.D. 47 and 61.

The Anniversary Meeting of the Society was held at the Warburg Institute on St. Andrew's Day, 30 November, Mr. D. F. Allen, President, in the chair. Mr. E. M. P. Hughes was elected to Ordinary Membership of the Society. The Treasurer in presenting his accounts pointed out that the solvency of the Society depended on the generosity of a number of donors, notably the British Academy, an anonymous donor, and Mr. Bagnall. Whilst warmly thanking these donors for their generosity he emphasized that this was a precarious basis for solvency and warned the Society of the possible necessity of an increase in subscription. The President then delivered his Annual Address and declared the result of the ballot for Officers and Council for 1962, which was:

President: D. F. Allen, M.A., F.S.A.

Vice-Presidents: A. E. Bagnall; C. E. Blunt, O.B.E., F.S.A.; E. Burstal, M.A., M.D.; G. V. Doubleday; H. H. King, M.A.; E. J. Winstanley, L.D.S.

Director: R. H. M. Dolley, B.A., F.S.A.

Secretary: P. Spufford, M.A.

Treasurer: C. S. S. Lyon, B.A., F.I.A.

Librarian: J. P. C. Kent, B.A., Ph.D., F.S.A.

Council: C. H. Allen; J. M. Ashby, M.A.; P. Grierson, M.A., F.B.A., F.S.A.; E. J. Harris, D.Sc.; Major C. W. Lister, R.A.; J. G. Pollard, M.A.; J. Porteous, M.A.; S. E. Rigold, M.A.; W. Slater; B. H. I. H. Stewart, B.A., F.S.A. (Scot.); P. H. Vernon, M.R.C.S., L.R.C.P.; J. Weibel.

EXHIBITIONS

January

By Dr. J. P. C. Kent:

A selection of coins from the Scarborough Treasure Trove comprising Base Groats, Half Groats, a Penny of Henry VIII and one of Edward VI in Henry's name; and the pot in which they were found; by courtesy of the Keeper of Coins, British Museum.

April

By C. S. S. Lyon:

A not-so-obstinate mule:

1. Æthelræd 2nd hand/'Crux' mule: EDPINE M^o LVND
2. Æthelræd 'Crux' type: EDPINE M^o LVND. Same reverse die as last.

Related to obstinate mules:

3. Æthelræd 'Crux' type: OSCETL M^{TO} EOFR. Die-links into Mr. Dolley's 'obstinate mules' chain.
4. Same type: OBAN M^{TO} EOFR. Same obv. die as previous coin.

By Mr. F. Elmore Jones:

Five mules of Edward the Confessor:

1. Mule Brooke types 5/6: +SIREN ON NIPEPORT (Newport)
2. Mule Brooke types 6/7: +PVLFRIC ON SEEAF (Shaftesbury)
3. Two Mules Brooke types 7/8: +EODPINE ON HVNTE (Huntingdon)
4. +LIOFPINE ON HVNT (Huntingdon)
5. Mule Brooke types 6/8; +LIOFPOLD ON PINCE (Winchester)

By Mr. B. H. I. H. Stewart:

Two Short-Cross pennies, mules to suggest that there was a break between Lawrence classes, VI, VII, and VIII and that they did not merge as Lawrence thought.

1. VII/VI. Obv., note very small lettering, especially ϵ and α . Rev., SIMON·ON·CAN·T—note tall lettering and pellet-barred N. Also a true late VI penny, same moneyer with pellet-barred N on both sides, and a true early VII penny with small lettering both sides for comparison.
2. VI/VIII. Obv., typical small late VII bust. Rev., i.m. cross potent, class VIII lettering. The difference between late VII and VIII letters is illustrated on two other pence of same moneyer. If this coin is not a mule, the only other explanation of it can be that the new lettering, which was characteristic of VIII, was introduced just before the new VIII face.

June

By Mr. J. M. Ashby:

1. William and Mary Halfpenny, 1694. Obv. reads GVLIELMVS·ET·MVRIA. Unpublished.
2. Charles I Tower Shilling, Francis type 2a, North Group C, m.m. Plume. Reads AVPICE for AVSPICE. Unpublished. The obv. m.m. is apparently struck over Heart, the preceding mark, which can be seen on the right of the Plume, although no Heart coins are known of this type and bust.

ADDRESS BY DEREK F. ALLEN

PRESIDENT OF THE BRITISH NUMISMATIC SOCIETY

Delivered at the Anniversary Meeting, 30 November 1961

It is once again time to report to you on the progress of your Society in the past year. This time a year ago I had to report a declining membership. This trend, I am glad to say, has been reversed. Our total membership today stands at 328, that is to say 216 ordinary members, 22 junior members, and 90 institutional members. This represents an overall gain of 10, but is still a long way short of the kind of figures we need if our activities and finances are to be on a really sound footing.

I am not convinced that the membership of our Society yet includes all those interested in British numismatics who gain from our Society's work. I appeal once again to those in professional contact with students and collectors to assist in our drive for recruitment. We have something worth while to offer.

Our Treasurer, Dr. Vernon, has drawn the attention of the Council to the large number of public and institutional libraries in this country and abroad which are not members and might very well wish to join. We are taking steps to bring this Society and its work to their attention.

Our losses through death this year have been small, I am glad to say. Dr. Wainwright of Fife was better known in London as an archaeologist than as a numismatist; he had been a member for five years. Mr. N. B. Mason and Mr. D. E. Smith were residents of Canada and Australia respectively. We are sorry to lose our members from the Commonwealth.

It was with particular interest that your Council has, during the year, received proposals for closer collaboration with groups interested in British numismatics overseas. One approach has come from Victoria, British Columbia, and another from New York. We propose to employ the provision made in our constitution for the appointment of Corresponding Members through whom to maintain a relationship. We do not propose, nor does our constitution allow for, actual affiliation of other societies. We do, nevertheless, extend a most hearty welcome to those who, like ourselves, meet to study British coins, wherever they may be, and in particular to the group of members of the British Numismatic Society which has begun to meet in New York.

It is again from America that I have to report a further example of welcome initiative. In the course of the year the Council became conscious that the Society had perhaps made insufficient provision for junior members, and had been considering the possibility of arranging one meeting a year, during the school holidays, especially for them. At this stage Mr. Edward V. Buxton of New York generously offered an annual prize, and the Council has come to the conclusion that this can best be devoted to a prize for some original research by a junior member. We can perhaps combine these two ideas and the best papers submitted by junior members can be read at a meeting for their benefit. We shall be making positive proposals on this shortly; meanwhile

I record our appreciation of another example of American generosity, to be remembered beside that of John Sanford Saltus.

The programme of the Society's meetings has displayed a welcome diversity and included reports of important research work from almost all the periods with which we are concerned. We have had two notable guest speakers, Mr. Strong from the National Portrait Gallery and Mr. Forbes, Deputy Warden of the Assay Office at Goldsmith's Hall. We continue to be indebted to Mr. Dolley, our Director, for this work, which always involves a lot of organization. I am sure that Mr. Dolley will, if re-elected, as I have no doubt he will be, provide us with equally good fare next year; it is a particular source of pride to a Society such as ours that the flow of worthwhile papers, which contribute to knowledge, shows no signs of drying up.

This applies equally to our *Journal*. In the course of the year you have received the *Journal* for 1959, which matches up fully in quality to its recent predecessors. I regret that it is the *Journal* for 1959, not for 1960. Printing delays still combine to defer the *Journal* for more than one year behind its titular year. Mr. King tells me the next *Journal* is to be expected early in the New Year. This is through no fault of your editors, Mr. Blunt and Mr. King, to whom our thanks are due—it is inherent in the present unhappy state of the printing trade. We have to reckon with slow and expensive printing as a fact of life and there is no sign that rising costs have reached a peak. We must expect annual, or nearly annual, increases in what will always be our major item of expenditure. I am afraid that the resources of our Society are insufficient to support for the immediate future a journal of the full length to which we have lately become accustomed. Unless we can increase our income, we are bound to set a limit to our expenditure.

Owing to the generosity of the British Academy and of anonymous benefactors the Society is solvent. But, as I had occasion to say in my similar address last year, we are not, on any proper accounting, paying our way. Your Treasurer, Dr. Vernon, has husbanded our resources and payment for the 1960 *Journal* is assured, but the outlook is not satisfactory. Unless the measures we are taking to increase membership prove more successful than I expect, we shall be faced with the necessity, perhaps as soon as next year, of increasing once again our annual subscription. Such a course is always unwelcome; it will bear heavily on some members and there is always a danger of consequent resignations, but I do not think we have yet reached a point where the law of diminishing returns will apply. I must, therefore, warn members to expect an increase in the annual subscription from 3 to 4 guineas for full members, and perhaps also a smaller increase for junior members. So soon after our last increase this comes as a matter of regret, but realities, in the form of bills, have to be faced and I think that members would in general rather pay more than see the *Journal* shrink.

There are effectively no economies the Society can introduce; we are comfortably and inexpensively housed here in the Warburg Institute, to whom we are very grateful for receiving us. Our library, combined last year with that of the Royal Numismatic Society, remains in the charge of Dr. Kent, who is now supervising the preparation of a joint card index or catalogue. We are always grateful to Dr. Barb for the helpful attention he gives to our

requests, whenever we call here. I wish that the Society could afford a larger budget towards the acquisition of new books, but I appeal to members not to forget the Society, or perhaps rather the Societies, when distributing copies of their own works. This applies especially to those of their publications which are not included in any of the journals to which the Societies subscribe. The library is almost our only luxury and it is not one I would forego.

In saying farewell, on your behalf, to Dr. Vernon, as your Treasurer, and welcoming Mr. Lyon, previously your Secretary, in his place, I am conscious that the office carries with it very heavy responsibilities.

The only other office I have to mention is that of Mr. Spufford, your present Secretary. We must be very grateful to him for his work on our behalf, which cannot be made any easier for him by the fact that his official duties in the University College of North Staffordshire keep him out of London most of the time.

I think it is right in this address to refer to the Annual Numismatic Congress organized by the Association of British Numismatic Societies. We are glad, as a Society, to take part annually in what has grown to become one of the most important and successful numismatic institutions in this country. I think we all look forward to this excursion and to the opportunity of meeting friends and fellow enthusiasts from all parts of the country. Much work is entailed and not a little expense for the host society, but we should all be the poorer if this institution were to lapse.

Another congress has taken place during the year, which is, perhaps, of greater significance to us, though less direct in its consequences. I refer to the International Numismatic Congress held in Rome in September. A number of your members were present including Mr. Blunt, Mr. Grierson, Mr. Dolley, and myself, not to mention Dr. Sutherland, who was one of the organizers. I think it is fair to say that, taking our Society and the Royal Numismatic Society together, the quality of the British contribution was high and sustained. The work of the Congress was intensive, more than a hundred papers, covering almost the whole field of numismatics, being given within a week. In certain fields, the Roman in particular, the Congress can, I think, be said to mark a turning-point in informed opinion on some of the major unsolved problems. The same cannot be said for British numismatics or those aspects of continental numismatics with which our studies most closely interlock; but the mutual respect and closer association with one another's problems, which such a Congress fosters, are potent factors in shaping the future of our subject. I am certain that the insularity which at one time tended to beset our studies is a thing of the past, but we must leave no nostrum untried for preventing a relapse. I hope that many more members than were to be seen this year in Rome will be in Vienna in 1968.

There was no doubt in my mind of the excellent reception accorded at the Congress, and indeed generally, to the work edited by Mr. Dolley and dedicated to our Honorary Member Sir Frank Stenton, which summarizes the present state of Anglo-Saxon numismatic studies. This book is a heartening response to the suggestion in an earlier address of mine that Anglo-Saxon numismatics had reached a stage where both the historian and the numismatist would welcome a summary of just where it had all reached. The actual

book has done more than that and the progress which it makes will be of lasting value.

Another publication during the year, to which I should refer, is the second volume in the Sylloge series, in which the Anglo-Saxon coins in the Hunterian and Coats collections at Glasgow are recorded. We cannot be too grateful for the publication for all to study of coins which have to many of us, despite Miss Robertson's invariable courtesy, been all too difficult of access. Miss Robertson is to be congratulated on bringing to fruition a work on which she first set forth more than twenty years ago.

I will not mention the many individual studies on British numismatics which have appeared this year, but I have noted with pleasure that the Society of Antiquaries has included in the volume of *Archaeologia* just published an up-to-date account by Mr. Blunt, with Mr. D. M. Wilson, of the important Trehiddle hoard of Anglo-Saxon coins and jewellery.

Other work is in hand which will be of the utmost interest to members. Mr. Grierson and Mr. Stewart are engaged in a general work on numismatic techniques and principles. We still await publication of Mr. Grierson's exceptionally important Ford lectures. There is no doubt that British numismatics remains alive.

The next few months are likely to see a development in which this Society is bound to take a very considerable interest. The Government has undertaken to make a statement before the end of the year on the subject of decimal coinage. There is every reason to suppose that, against the background of the Government's policy on the European Common Market, the decision will be in favour of the introduction of decimal coinage. I am bound to say that I think that would be the right decision, despite the transitional problems and the theoretical attractions of duodecimals. So too, if our debate of two years ago is any guide, do a majority of our members. But it will be the end of a fine and noble tradition and of one of those curiously English distinctions which convince the rest of the world that we are mad. As a Society, to which pounds, shillings, and pence have a more specialized meaning than to the general public, the passing of these denominations, as they have been known for more than 1,200 years, will not go unmourned.

A change of this kind, if it comes, is, however, a challenge. Over the centuries we have nothing to be ashamed of in our numismatic art. Perhaps we do not have Frederick II's *Augustale*, the great Renaissance portraits of Italy, or the more magnificent thalers of Bohemia, but from Offa onwards, and even before, we can show distinctive and distinguished specimens of coin making. Some of the work of the Wyons in the last century will be fully back in favour when the cycle of taste has revolved. In this century, however, I do not think that even the kindest judgement would accord to our coins any outstanding merit of artistic quality or even period flavour. They represent the official pursuit of a mediocrity at its worst, with the aim of avoiding criticism. Even our present Queen's portrait, originally designed, I believe, in the style of a Florentine profile medal, with straight back and neck, has lost much of its distinction because it was felt officially that a less conventional pose was more appropriate. So we have an essentially formal head and wreath, combined with an essentially slipshod neck and bust. This was bad

enough, but official British art could hardly sink lower than the present Bank Notes. The £1 was bad enough; the 10s. is, in my opinion, appreciably worse.

If decimal coinage is introduced, this will undoubtedly involve a complete recoinage of the currency, a task of fantastically greater dimensions than faced any of our monarchs who previously embarked on this drastic course. But they had at their disposal, or were willing to import, designers and artists who would, in the mood of contemporary Europe, produce designs and workmanship as good as was to be found anywhere else. Before this country is swept into a new coinage in new denominations, turned out in the official style of mid-twentieth-century England, there must be time for thought and design, so that we may have in our hands and pockets a coinage which, as numismatists, we are not ashamed to handle.

Do we know what such a coinage should look like? We know how to admire the achievements of the past, to compare one style with another and to pick which we like best. But, given the token character of contemporary coinage and the manufacturing necessities of producing dies which will stand up to wear and resist falsification, given also the impossibility of pleasing all tastes, can we get nearer to what we want to achieve?

In the last resort those are questions which can only be answered by industrial designers, who lead and mould, as well as follow, taste. We have in our lifetime witnessed a revolution in taste and artistic appreciation of startling dimensions. When I was a young man one was still an object of mockery if one expressed a liking for the French impressionists, whom the public to-day will queue to see at the Tate Gallery. This revolution is expressed in most unexpected ways; not long ago, in the course of official duties, I visited a seamen's public house in Yorkshire. I wonder if the publican would have understood if he had been told that the wall-paper behind his bar could never have existed but for the work of Bracque and Picasso. One of the more startling developments of the century is that he might. The public is more aware of standards of taste than for a great many years.

That revolution has left coinage almost untouched and the medal scarcely less so. The time has come when something of the new thinking must find its way into the official art of coin design. There is already a Committee that considers such designs, but even its distinguished membership cannot cause official design to run ahead of taste. I believe it is the duty of all numismatists who revere their subject to help to form a new taste in such matters. It is for us to take a lead.

I will not try to tell you what form taste in the latter part of the twentieth century should take, but in my view we should not feel ourselves bound by tradition or play with echoes of historic coin motifs. It is time for new thinking. In the traditional vein, I know of no better contemporary coinage than that of the Vatican. Others may think differently. But on this I hope we shall be all agreed, that our new decimal coinage, when it comes, must be a worthy successor to the invention displayed when Offa introduced his penny or Elizabeth her crown.

BALANCE SHEET AS AT 31 OCTOBER 1960

REPORT OF THE AUDITORS TO THE MEMBERS OF THE BRITISH NUMISMATIC SOCIETY

GILBERTS, HALLETT, & EGLINGTON,
Chartered Accountants

EXPENDITURE AND INCOME ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 1960

EXPENDITURE

EXPENDITURE					
1958/9					
£		£	s.	d.	£ s. d.
14	Printing and Stationery . . . . .	.	.	.	10 10 9
21	Expenses of meetings, Rent, and Library Facilities . . . . .	.	.	.	21 0 0
86	Sundry Expenses . . . . .	.	.	.	39 4 5
	Additional cost for 1958 <i>Journal</i> underprovided . . . . .	.	.	.	32 11 1
—	Additional provision for 1959 <i>Journal</i>	125	5	10	
—	Less Grant from British Academy	120	0	0	
					5 5 10
	Provision for 1960 <i>Journal</i>	1,100	0	0	
1,118	Less Donation	50	0	0	
					1,050 0 0
					1,087 16 11
<u>£1,239</u>					<u>£1,158 12 1</u>

INCOME

1958/9		<i>£ s. d.</i>	<i>£ s. d.</i>
581	Subscriptions received for 1960	784 2 10	
145	Subscriptions in arrear received during year	37 16 0	
			821 18 10
9	Entrance Fees		14 2 10
	Donations		
—	H. C. Curwen	3 3 0	
—	Anonymous	100 0 0	
—	Anonymous	100 0 0	
10	A. E. Bagnall	14 14 0	
			217 17 0
64	Interest Received		44 15 8
—	Sale of Back Volumes and Duplicates		2 2 0
278	Income Tax Recoverable		— — —
129	Excess of Expenditure over Income carried to General Purposes Fund		57 15 9
			£1,158 12 1
	£1,239		

LIST OF MEMBERS

OF THE

BRITISH NUMISMATIC SOCIETY

1 SEPTEMBER 1962

ROYAL MEMBERS

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